

FIGURE 1-1

S	K	R	Q	A	Q	Q	M	V	Q	P	Q	S	P	V	
GAAG	AGC	AAG	AGG	CAG	GCT	CAG	CAA	ATG	GTT	CAG	CCC	CAG	TCC	CCG	GTG
1				5					10					15	49
A	V	S	Q	S	K	P	G	C	Y	D	N	G	K	H	Y
GCT	GTC	AGT	CAA	AGC	AAG	CCC	GGT	TGT	TAT	GAC	AAT	GGA	AAA	CAC	TAT
				20				25						30	97
Q	I	N	Q	Q	W	E	R	T	Y	L	G	N	V	L	V
CAG	ATA	AAT	CAA	CAG	TGG	GAG	CGG	ACC	TAC	CTA	GGT	AAT	GTG	TTG	GTT
				35				40						45	145
C	T	C	Y	G	G	S	R	G	F	N	C	E	S	K	P
TGT	ACT	TGT	TAT	GGA	GGA	AGC	CGA	GGT	TTT	AAC	TGC	GAA	AGT	AAA	CCT
				50				55				60			193
E	A	E	E	T	C	F	D	K	Y	T	G	N	T	Y	R
GAA	GCT	GAA	GAG	ACT	TGC	TTT	GAC	AAG	TAC	ACT	GGG	AAC	ACT	TAC	CGA
				65				70			75				241
V	G	D	T	Y	E	R	P	K	D	S	M	I	W	D	C
GTG	GGT	GAC	ACT	TAT	GAG	CGT	CCT	AAA	GAC	TCC	ATG	ATC	TGG	GAC	TGT
				80				85			90				289

FIGURE 1-2

T	C	I	G	A	G	R	G	R	I	S	C	T	I	A	N	337
ACC	TGC	ATC	GGG	GCT	GGG	CGA	GGG	AGA	ATA	AGC	TGT	ACC	ATC	GCA	AAC	
																110
																105
																100
R	C	H	E	G	G	Q	S	Y	K	I	G	D	T	W	R	385
CGC	TGC	CAT	GAA	GGG	GGT	CAG	TCC	TAC	AAG	ATT	GGT	GAC	ACC	TGG	AGG	
																125
																120
																115
R	P	H	E	T	G	G	Y	M	L	E	C	V	C	L	G	433
AGA	CCA	CAT	GAG	ACT	GGT	GGT	TAC	ATG	TTA	GAG	TGT	GTG	TGT	CTT	GGT	
																140
																135
																130
N	G	K	G	E	W	T	C	K	P	I	A	E	K	C	F	481
AAT	GGA	AAA	GGA	GAA	TGG	ACC	TGC	AAG	CCC	ATA	GCT	GAG	AAG	TGT	TTT	
																155
																150
																145
D	H	A	A	G	T	S	Y	V	V	G	E	T	W	E	K	529
GAT	CAT	GCT	GCT	GGG	ACT	CCC	TAT	GTG	GTC	GGA	GAA	ACG	TGG	GAG	AAG	
																175
																170
																165
																160

FIGURE 1-3

P Y Q G W M M V D C T C L G E G  
 CCC TAC CAA GGC TGG ATG ATG ATG GTA GAT TGT ACT TGC CTG GGA GAA GGC  
 180 185 577

S G R I T T C T S R N R C N D Q D  
 AGC GGA CGC ATC ACT ACT TGC ACT TCT AGA AAT AGA TGC AAC GAT CAG GAC  
 195 200 625

T R T S Y R I G D T W S K K D N  
 ACA AGG ACA TCC TAT AGA ATT TGA GAC ACC TGG AGC AAG AAG GAT AAT  
 210 215 3/86 673 86

R G N L L Q C I C T G N G R G E  
 CGA GGA AAC CTG CTC CAG TGC ATC TGC ACA GGC AAC GGC CGA GGA GAG  
 225 230 235 721

W K C E R H T S V Q T T S S G S  
 TGG AAG TGT GAG AGG CAC ACC TCT GTG CAG ACC ACA TCG AGC GGA TCT  
 240 245 250 255 769

G P F T D V R A A V Y Q P Q P H  
 GGC CCC TTC ACC GAT GAT GTT CGT GCA GCT GTT TAC CAA CCG CAG CCT CAC  
 260 265 270 817

FIGURE 1-4

P Q P P P Y G H C V T D S G V V  
 CCC CAG CCT CCT CCC TAT GGC CAC TGT GTC ACA GAC AGT GGT GTG GTC  
 275 280 285 865  
  
 Y S V G M Q W L K T Q G N K Q M  
 TAC TCT GTG GGG ATG CAG TGG TTG AAG ACA CAA GGA AAT AAG CAA ATG  
 290 295 300 913  
  
 L C T C L G N G V S C Q E T A V  
 CTT TGC ACG TGC CTG GGC AAC GGA GTC AGC TGC CAA GAG ACA GCT GTA  
 305 310 315 961  
  
 T Q T Y G G N L N G E P C V L P  
 ACC CAG ACT TAC GGT GGC AAC TTA AAT GGA GAG CCA TGT GTC TTA CCA  
 320 325 330 335 1009  
  
 F T Y N G R T F Y S C T T E G R  
 TTC ACC TAC AAT GGC AGG ACG TTC TAC TCC TGC ACC ACG GAA GGG CGA  
 340 345 350 1057

4/86

FIGURE 1-5

Q D G H L W C S T T S N Y E Q D	1105
CAG GAC GGA CAT CTT TGG TGC AGC ACA ACT TCG AAT TAT GAG CAG GAC	365
	360
Q K Y S F C T D H T V L V Q T Q	1153
CAG AAA TAC TCT TTC TGC ACA GAC CAC ACT GTT TTG GTT CAG ACT CAA	380
	375
G G N S N G A L C H F P F L Y N	1201
GGA GGA AAT TCC AAT GGT GCC TTG TGC CAC TTC CCC TTC CTA TAC AAC	395
	390
N H N Y T D C T S E G R R D N M	1249
AAC CAC AAT TAC ACT GAT TGC ACT TCT GAG GGC AGA AGA GAC AAC ATG	415
400	410
K W C G T T Q N Y D A D Q K F G	1297
AAG TGG TGT GGG ACC ACA CAG AAC TAT GAT GCC GAC CAG AAG TTT GGG	430
	425
F C P M A A H E E I C T T N E G	1345
TTC TGC CCC ATG GCT GCC CAC GAG GAA ATC TGC ACA ACC AAT GAA GGG	445
	440
	435

5/86

09492971.012700

FIGURE 1-6

V	M	Y	R	I	G	D	Q	W	D	K	Q	H	D	M	G	1393
GTC	ATG	TAC	CGC	ATT	GGA	GAT	CAG	TGG	GAT	AAG	CAG	CAT	GAC	ATG	GGT	
		450					455					460				
H	M	M	R	C	T	C	V	G	N	G	R	G	E	W	T	1441
CAC	ATG	ATG	AGG	TGC	ACG	TGT	GTT	GGG	AAT	GGT	CGT	GGG	GAA	TGG	ACA	
		465				470					475					
C	I	A	Y	S	Q	L	R	D	Q	C	I	V	D	D	I	1489
TGC	ATT	GCC	TAC	TCG	CAA	CTT	CGA	GAT	CAG	TGC	ATT	GTT	GAT	GAC	ATC	
		480			485				490						495	
T	Y	N	V	N	D	T	F	H	K	R	H	E	E	G	H	1537
ACT	TAC	AAT	GTG	AAC	GAC	ACA	TTC	CAC	AAG	CGT	CAT	GAA	GAG	GGG	CAC	
				500			505							510		
M	L	N	C	T	C	F	G	Q	G	R	G	R	W	K	C	1585
ATG	CTG	AAC	TGT	ACA	TGC	TTC	GGT	CAG	GGT	CGG	GGC	AGG	TGG	AAG	TGT	
			515				520						525			

6/86

09492971-012700

FIGURE 1-7

D P V D Q C Q C Q D S E T G T F Y Q  
GAT CCC GTC GAC CAA TGC CAG GAT TCA GAG ACT GGG ACG TTT TAT CAA  
530 535 540 1633

I G D S W E K Y V H G V R Y Q C  
ATT GGA GAT TCA TGG GAG AAG TAT GTG CAT GGT GTC AGA TAC CAG TGC  
545 550 555 1681

Y C Y G R G I G E W H C Q P L Q  
TAC TGC TAT GGC CGT GGC ATT GGG GAG TGG CAT TGC CAA CCT TTA CAG  
560 565 570 1729

T Y P S S S S G P V E V F I T E T  
ACC TAT CCA AGC TCA AGT GGT CCT GTC GAA GTA TTT ATC ACT GAG ACT  
580 585 590 1777

P S Q P N S S H P I Q W N A P Q P  
CCG AGT CAG CCC AAC TCC CAC CCC ATC CAG TGG AAT GCA CCA CAG CCA  
595 600 605 1825

S H I S K Y I L R W R P K N S V  
TCT CAC ATT TCC AAG TAC ATT CTC AGG TGG AGA CCT AAA AAT TCT GTA  
610 615 620 1873

FIGURE 1-8

G R GGC CGT TGG AAG GAA GCT ACC ATA CCA GGC CAC TTA AAC TCC TAC ACC	1921
625 630 635	
I K G G L K P G V V Y E G Q L I S	1969
ATC AAA GGC CTG AAG CCT GGT GTG GTA TAC GAG GGC CAG CTC ATC AGC	
640 645 650 655	
I Q Q CAG CAG TAC GGC CAC CAA GAA GTG ACT CGC TTT GAC TTC ACC ACC	2017
660 665 670	
T S T S T P V T S N T V T G E T	2065
ACC AGC ACC AGC ACA CCT GTG ACC AGC AAC ACC GTG ACA GGA GAG ACG	
675 680 685	
T P F S P L V A T S E S V T E I	2113
ACT CCC TTT TCT CCT CTT GTG GCC ACT TCT GAA TCT GTG ACC GAA ATC	
690 695 700	

8/86

09492971.012700



FIGURE 1-9

T A S S F V V S W V S A S D T V  
ACA GCC AGT AGC TTT GTG GTC TCC TGG GTC TCA GCT TCC GAC ACC GTG  
705 710 715 2161

S G F R V E Y E L S E E G D E P  
TCG GGA TTC CGG GTG GAA TAT GAG CTG AGT GAG GAG GGA GAT GAG CCA  
720 725 730 735 2209

Q Y L D L P S T A T S V N I P D  
CAG TAC CTG GAT CTT CCA AGC ACA GCC ACT TCT GTG AAC ATC CCT GAC  
740 745 750 2257 9/86

L L P G R K Y I V N V Y Q I S E  
CTG CTT CCT GGC CGA AAA TAC ATT GTA AAT GTC TAT CAG ATA TCT GAG  
755 760 765 2305

D G E Q S L I L S T S Q T T A P  
GAT GGG GAG CAG AGT TTG ATC CTG TCT ACT TCA CAA ACA ACA GCG CCT  
770 775 780 2353

D A P P D P T V D Q V D D T S I  
GAT GCC CCT CCT GAC CCG ACT GTG GAC CAA GTT GAT GAC ACC TCA ATT  
785 790 795 2401

FIGURE 1-10

V V R W S R P Q A P I T G Y R I  
GTT GTT CGC TGG AGC AGA CCC CAG GCT CCC ATC ACA GGG TAC AGA ATA  
800 805 810 2449 815

V Y S P S TCA GTA GAA GGT AGC AGC ACA GAA CTC AAC CTT CCT  
820 825 2497 830

E T A N S V T L S D L Q P G V Q  
GAA ACT GCA AAC TCC GTC ACC CTC AGT GAC TTG CAA CCT GGT GTT CAG  
835 840 845 10/86 2545

Y N I T I Y A V E E N Q E S T P  
TAT AAC ATC ACT ATC TAT GCT GGT GAA GAA AAT CAA GAA AGT ACA CCT  
850 855 860 2593

V V I Q Q E T T G T P R S D T V  
GTT GTC ATT CAA CAA GAA ACC ACT GGC ACC CCA CGC TCA GAT ACA GTG  
865 870 875 2641

FIGURE 1-11

P	S	P	R	D	L	Q	F	V	E	V	T	D	V	K	V	2689
CCC	TCT	CCC	AGG	GAC	CTG	CAG	TTT	GTG	GAA	GTG	ACA	GAC	GTG	AAG	GTC	895
880					885				890							
T	I	M	W	T	P	P	E	S	A	V	T	G	Y	R	V	2737
ACC	ATC	ATG	TGG	ACA	CCG	CCT	GAG	AGT	GCA	GTG	ACC	GGC	TAC	CGT	GTG	
				900				905						910		
D	V	I	P	V	N	L	P	G	E	H	G	Q	R	L	P	2785
GAT	GTG	ATC	CCC	GTC	AAC	CTG	CCT	GGC	GAG	CAC	GGG	CAG	AGG	CTG	CCC	
			915				920						925			
I	S	R	N	T	F	A	E	V	T	G	L	S	P	G	V	2833
ATC	AGC	AGG	AAC	ACC	TTT	GCA	GAA	GTC	ACC	GGG	CTG	TCC	CCT	GGG	GTC	
			930			935					940					
T	Y	Y	F	K	V	F	A	V	S	H	G	R	E	S	K	2881
ACC	TAT	TAC	TTC	AAA	GTC	TTT	GCA	GTG	AGC	CAT	GGG	AGG	GAG	AGC	AAG	
	945					950					955					
P	L	T	A	Q	Q	CAG	ACA	ACC	AAA	CTG	GAT	GCT	CCC	ACT	AAC	2929
CCT	CTG	ACT	GCT	CAA	CAG	CAA	ACC	AAA	CTG	GAT	GCT	CCC	ACT	AAC	CTC	975
960				965						970						

11/86

09492971.012700

FIGURE 1-12

Q F V N E T D S T V L V R W T P	2977
CAG TTT GTC AAT GAA ACT GAT TCT ACT GTC CTG CTG GTG AGA TGG ACT CCA	980 985 990
P R A Q CAG ATA ACA GGA TAC CGA CTG ACC GTG GGC CTT ACC CGA	3025 1000 1005
CCT CGG GCC CAG CCC AGG CAG TAC AAT GTG GGT CCC TCT GTC TTC AAG TAC	3073 1010 1015 1020
R G Q CAG CCC AGG CAG TAC AAT GTG GGT CCC TCT GTC TTC AAG TAC	3121
P L R N L Q CAG CCT GCA TCT GAG TAC ACC GTA TCC CTC GTG	3169
CCC CTG AGG AAT CTG CAG CCA GAG AGC CCC AAA GCC ACT GGA GTC TTT ACC	1025 1030 1035 1040 1045 1050 1055
A I K G N Q CAA GAG AGC CCC AAA GCC ACT GGA GTC TTT ACC	1040 1045 1050 1055

12/86

FIGURE 1-13

T	L	Q	P	G	S	S	I	P	P	Y	N	T	E	V	T	3217
ACA	CTG	CAG	CCT	GGG	AGC	TCT	ATT	CCA	CCT	TAC	AAC	ACC	GAG	GTG	ACT	
				1060					1065							1070
E	T	T	I	V	I	T	W	T	P	A	P	R	I	G	F	3265
GAG	ACC	ACC	ATC	GTG	ATC	ACA	TGG	ACG	CCT	GCT	CCA	AGA	ATT	GGT	TTT	
				1075					1080							1085
K	L	G	V	R	P	S	Q	G	G	E	A	P	R	E	V	3313
AAG	CTG	GGT	GTA	CGA	CCA	AGC	CAG	GGA	GGA	GAG	GCA	CCA	CGA	GAA	GTG	
				1090					1095							1100
T	S	D	S	G	S	I	V	V	S	G	L	T	P	G	V	3361
ACT	TCA	GAC	TCA	GGA	AGC	ATC	GTT	GTG	TCC	GGC	TTG	ACT	CCA	GGA	GTA	
				1105					1110							1115
E	Y	V	Y	T	I	Q	V	L	R	D	G	Q	E	R	D	3409
GAA	TAC	GTC	TAC	ACC	ATC	CAA	GTC	CTG	AGA	GAT	GGA	CAG	GAA	AGA	GAT	
				1120					1125							1130
A	P	I	V	N	K	V	V	T	P	L	S	P	P	T	N	3457
GCG	CCA	ATT	GTA	AAC	AAA	GTG	GTG	ACA	CCA	TTG	TCT	CCA	CCA	ACA	AAC	
				1140					1145							1150

13/86

FIGURE 1-14

L	H	L	E	A	N	P	D	T	G	V	L	T	V	S	W	
TTG	CAT	CTG	GAG	GCA	AAC	CCT	GAC	ACT	GGA	GTG	CTC	ACA	GTC	TCC	TGG	3505
			1155				1160						1165			
E	R	S	T	T	P	D	I	T	G	Y	R	I	T	T	T	
GAG	AGG	AGC	ACC	ACC	CCA	GAC	ATT	ACT	GGT	TAT	AGA	ATT	ACC	ACA	ACC	3553
			1170				1175					1180				
P	T	N	G	Q	Q	G	N	S	L	E	E	V	V	H	A	
CCT	ACA	AAC	GGC	CAG	CAG	GGA	AAT	TCT	TTG	GAA	GAA	GTG	GTC	CAT	GCT	3601
			1185				1190				1195					
D	Q	S	S	C	T	F	D	N	L	S	P	G	L	E	Y	
GAT	CAG	AGC	TCC	TGC	ACT	TTT	GAT	AAC	CTG	AGT	CCC	GGC	CTG	GAG	TAC	
			1200				1205			1210					1215	
N	V	S	V	Y	T	V	K	D	D	K	E	S	V	P	I	
AAT	GTC	AGT	GTT	TAC	ACT	GTC	AAG	GAT	GAC	AAG	GAA	AGT	GTC	CCT	ATC	3697
							1220			1225					1230	

14/86

FIGURE 1-15

S D T I I I P A V P P P T D L R F  
TCT GAT ACC ATC ATC CCA GCT GTT CCT CCT CCC ACT GAC CTG CGA TTC  
1235 1240 1245 3745

T N I G P D T M R V T W A P P P  
ACC AAC ATT GGT CCA GAC ACC ATG CGT GTC ACC TGG GCT CCA CCC CCA  
1250 1255 1260 3793

S I D L T N F L V R Y S P V K N  
TCC ATT GAT TTA ACC AAC TTC CTG GTG CGT TAC TCA CCT GTG AAA AAT  
1265 1270 1275 3841

E E D V A E L S I S P S D N A V  
GAG GAA GAT GTT GCA GAG TTG TCA ATT TCT CCT TCA GAC AAT GCA GTG  
1280 1285 1290 3889

V L T N L L P G T E Y V V S V S  
GTC TTA ACA AAT CTC CTG CCT GGT ACA GAA TAT GTA GTG AGT GTC TCC  
1300 1305 1310 3937

S V Y E Q H E S T P L R G R Q K  
AGT GTC TAC GAA CAA CAT GAG AGC ACA CCT CTT AGA GGA AGA CAG AAA  
1315 1320 1325 3985

FIGURE 1-16

T G L D S P T G I D F S D I T A  
 ACA GGT CTT GAT TCC CCA ACT GGC ATT GAC TTT TCT GAT ATT ACT GCC  
 1330 1335 1340 4033

N S F T V H W I A P R A T I T G  
 AAC TCT TTT ACT GTG CAC TGG ATT GCT CCT CGA GCC ACC ATC ACT GCC  
 1345 1350 1355 4081

16/86

Y R I R H H P E H F S G R P R E  
 TAC AGG ATC CGC CAT CAT CCC GAG CAC TTC AGT GGG AGA CCT CGA GAA  
 1360 1365 1370 1375 4129

D R V P H S R N S I T L T N L T  
 GAT CGG GTG CCC CAC TCT CGG AAT TCC ATC ACC CTC ACC AAC CTC ACT  
 1380 1385 1390 4177

P G T E Y V V S I V A L N G R E  
 CCA GGC ACA GAG TAT GTG GTC AGC ATC GTT GCT CTT AAT GGC AGA GAG  
 1395 1400 1405 4225



FIGURE 1-17

E S P L L I G Q Q Q S T V S D V P  
GAA AGT CCC TTA TTG ATT GGC CAA CAA TCA ACA GTT TCT GAT GTT CCG  
1410 1415 1420 4273

R D L E V V A A T P T S L L I S  
AGG GAC CTG GAA GTT GTT GCT GCG ACC CCC ACC AGC CTA CTG ATC AGC  
1425 1430 1435 4321

W D A P A V T V R Y Y R I T Y G  
TGG GAT GCT CCT GCT GTC ACA GTG AGA TAT TAC AGG ATC ACT TAC GGA  
1440 1445 1450 1455 17/86 4369

E T G G N S P V Q E F T V P G S  
GAA ACA GGA GGA AAT AGC CCT GTC CAG GAG TTC ACT GTG CCT GGG AGC  
1460 1465 1470 4417

K S T A T I S G L K P G V D Y T  
AAG TCT ACA GCT ACC ATC AGC GGC CTT AAA CCT GGA GTT GAT TAT ACC  
1475 1480 1485 4465

I T V Y A V T G R G D S P A S S  
ATC ACT GTG TAT GCT ACT GGC CGT GGA GAC AGC CCC GCA AGC AGC  
1490 1495 1500 4513

FIGURE 1-18

K	P	I	S	I	N	Y	R	T	E	I	D	K	P	S	Q	4561
AAG	CCA	ATT	TCC	ATT	AAT	TAC	CGA	ACA	GAA	ATT	GAC	AAA	CCA	TCC	CAG	
1505						1510					1515					
M	Q	V	T	D	V	Q	D	N	S	I	S	V	K	W	L	4609
ATG	CAA	GTG	ACC	GAT	GTT	CAG	GAC	AAC	AGC	ATC	AGT	GTC	AAG	TGG	CTG	
1520					1525					1530					1535	
P	S	S	S	P	P	V	T	G	Y	R	V	T	T	P	K	4657
CCT	TCA	AGT	TCC	CCT	GTT	ACT	GGT	TAC	AGA	GTA	ACC	ACC	ACT	CCC	AAA	
				1540					1545					1550		
N	G	P	G	P	T	K	T	K	T	A	G	P	D	Q	T	4705
AAT	GGA	CCA	GGA	CCA	ACA	AAA	ACT	AAA	ACT	GCA	GGT	CCA	GAT	CAA	ACA	
			1555				1560					1565				
E	M	T	I	E	G	L	Q	P	T	V	E	Y	V	V	S	4753
GAA	ATG	ACT	ATT	GAA	GGC	TTG	CAG	CCC	ACA	GTG	GAG	TAT	GTG	GTT	AGT	
			1570				1575				1580					

FIGURE 1-19

V Y A Q N P S G E S Q P L V Q T  
GTC TAT GCT CAG AAT CCA AGC GGA GAG AGT CAG CCT CTG GTT CAG ACT  
1585 1590 1595 4801

A V T N I D R P K G L A F T D V  
GCA GTA ACC AAC AAT GAT CGC CCT AAA GGA CTG GCA TTC ACT GAT GTG  
1600 1605 1610 4849 1615

D V D S I K I A W E S P Q G Q V  
GAT GTC GAT TCC ATC AAA ATT GCT TGG GAA AGC CCA CAG GGG CAA GTT  
1620 1625 1630 19/86 4897

S R Y R V T Y S S P E D G I H E  
TCC AGG TAC AGG GTG ACC TAC TCG AGC CCT GAG GAT GGA ATC CAT GAG  
1635 1640 1645 4945

L F P A P D G E E D T A E L Q G  
CTA TTC CCT GCA CCT GAT GGT GAA GAA GAC ACT GCA GAG CTG CAA GGC  
1650 1655 1660 4993

L R P G S E Y T V S V V A L H D  
CTC AGA CCG GGT TCT GAG TAC ACA GTC AGT GTG GTT GCC TTG CAC GAT  
1665 1670 1675 5041

20/86

FIGURE 1-20

D	M	E	S	Q	P	L	I	G	T	Q	S	T	A	I	P	5089
GAT	ATG	GAG	AGC	CAG	CCC	CTG	ATT	GGA	ACC	CAG	TCC	ACA	GCT	ATT	CCT	1695
1680					1685					1690						
A	P	T	D	L	K	F	T	Q	V	T	P	T	S	L	S	5137
GCA	CCA	ACT	GAC	CTG	AAG	TTC	ACT	CAG	GTC	ACA	CCC	ACA	AGC	CTG	AGC	
				1700					1705					1710		
A	Q	W	T	P	P	N	V	Q	L	T	G	Y	R	V	R	5185
GCC	CAG	TGG	ACA	CCA	CCC	AAT	GTT	CAG	CTC	ACT	GGA	TAT	CGA	GTG	CGG	
				1715				1720						1725		
V	T	P	K	E	K	T	G	P	M	K	E	I	N	L	A	5233
GTG	ACC	CCC	AAG	GAG	AAG	ACC	GGA	CCA	ATG	AAA	GAA	ATC	AAC	CTT	GCT	
				1730				1735				1740				
P	D	S	S	S	V	V	V	S	G	L	M	V	A	T	K	5281
CCT	GAC	AGC	TCA	TCC	GTG	GTT	GTA	TCA	GGA	CTT	ATG	GTG	GCC	ACC	AAA	
				1745				1750				1755				

FIGURE 1-21

Y E V S V Y A L K D T L T S R P  
TAT GAA GTG AGT GTC TAT GCT CTT AAG GAC ACT TTG ACA AGC AGA CCA  
1760 1765 1770 1775 5329

A Q G V V T T L E N V S P P R R  
GCT CAG GGT GTT GTC ACC ACT CTG GAG AAT GTC AGC CCA CCA AGA AGG  
1780 1785 1790 5377

A R V T D A T E T T I T I S W R  
GCT CGT GTG ACA GAT GCT ACT GAG ACC ACC ATC ACC ATT AGC TGG AGA  
1795 1800 1805 5425

T K T E T I T G F Q V D A V P A  
ACC AAG ACT GAG ACG ATC ACT GGC TTC CAA GTT GAT GCC GTT CCA GCC  
1810 1815 1820 5473

N G Q T P I Q R T I K P D V R S  
AAT GGC CAG ACT CCA ATC CAG AGA ACC ATC AAG CCA GAT GTC AGA AGC  
1825 1830 1835 5521

Y T I T G L Q P G T D Y K I Y L  
TAC ACC ATC ACA GGT TTA CAA CCA GGC ACT GAC TAC AAG ATC TAC CTG  
1840 1845 1850 1855 5569

FIGURE 1-22

Y T L N D N A R S S P V V I D A  
TAC ACC TTG AAT GAC AAT GCT CGG AGC TCC CCT GTG GTC ATC GAC GCC  
1860 1865 1870 5617

S T A I D A P S N L R F L A T T  
TCC ACT GCC ATT GAT GCA CCA TCC AAC CTG CGT TTC CTG GCC ACC ACA  
1875 1880 1885 5665

P N S L L V S W Q P P R A R I T  
CCC AAT TCC TTG CTG GTA TCA TGG CAG CCG CCA CGT GCC AGG ATT ACC  
1890 1895 1900 5713 22/86

G Y I I K Y E K P G S P P R E V  
GGC TAC ATC ATC AAG TAT GAG AAG CCT GGG TCT CCT CCC AGA GAA GTG  
1905 1910 1915 5761

V P R P R P G V T E A T I T G L  
GTC CCT CGG CCC CGC CCT GGT GTC ACA GAG GCT ACT ATT ACT GGC CTG  
1920 1925 1930 1935 5809

FIGURE 1-23

E P G T E Y T I Y V I A L K N N  
GAA CCG GGA ACC GAA TAT ACA ATT TAT GTC ATT GCC CTG AAG AAT AAT  
1940 1945 1950 5857

Q K S E P L I G R K K T D E L P  
CAG AAG AGC GAG CCC CTG ATT GGA AGG AAA AAG ACA GAC GAG CTT CCC  
1955 1960 1965 5905

Q L V T L P H P N L H G P E I L  
CAA CTG GTA ACC CTT CCA CAC CCC AAT CTT CAT GGA CCA GAG ATC TTG  
1970 1975 1980 23/86 5953

D V P S T V Q K T P F V T H P G  
GAT GTT CCT TCC ACA GTT CAA AAG ACC CCT TTC GTC ACC CAC CCT GGG  
1985 1990 1995 6001

Y D T G N G I Q L P G T S G Q Q  
TAT GAC ACT GGA AAT GGT ATT CAG CTT CCT GGC ACT TCT GGT CAG CAA  
2000 2005 2010 2015 6049

P S V G Q Q M I F E E H G F R R  
CCC AGT GTT GGG CAA CAA ATG ATC TTT GAG GAA CAT GGT TTT AGG CGG  
2020 2025 2030 6097

FIGURE 1-24

T	T	P	P	T	T	A	T	P	I	R	H	R	P	P	
ACC	ACA	CCG	CCC	ACA	ACG	GCC	ACC	CCC	ATA	AGG	CAT	AGG	CCA	AGA	CCA
			2035					2040					2045		6145
Y	P	P	N	V	G	Q	E	A	L	S	Q	T	T	I	S
TAC	CCG	CCG	AAT	GTA	GGA	CAA	GAA	GCT	CTC	TCT	CAG	ACA	ACC	ATC	TCA
			2050				2055					2060			6193
W	A	P	F	Q	D	T	S	E	Y	I	I	S	C	H	P
TGG	GCC	CCA	TTC	CAG	GAC	GAC	ACT	TCT	TAC	ATC	ATT	TCA	TGT	CAT	CCT
						2070				2075					6241
V	G	T	D	E	E	P	L	Q	F	R	V	P	G	T	S
GTT	GCC	ACT	GAT	GAA	GAA	CCC	TTA	CAG	TTC	AGG	GTT	CCT	GGA	ACT	TCT
					2085					2090					6289
2080															2095
T	S	A	T	L	T	G	L	T	R	G	A	T	Y	N	I
ACC	AGT	GCC	ACT	CTG	ACA	GGC	CTC	ACC	AGA	GGT	GCC	ACC	TAC	AAC	ATC
										2100				2110	6337



FIGURE 1-25

I V E A L K D Q Q R H K V R E E  
ATA GTG GAG GCA CTG AAA GAC CAG CAG AGG CAT AAG GTT CGG GAA GAG  
2115 2120 6385

V T V G N S V N E G L N Q P T  
GTT GTT ACC GTG GGC AAC TCT GTC AAC GAA GGC TTG AAC CAA CCT ACG  
2130 2135 6433

D S C F D P Y T V S H Y A V G  
GAT GAC TCG TGC TTT GAC CCC TAC ACA GTT TCC CAT TAT GCC GTT GGA  
2145 2150 2155 6481

25/86

D E W E R M S E S G F K L L C Q  
GAT GAG TGG GAA CGA ATG TCT TCT GAA TCA GGC TTT AAA CTG TTG TGC CAG  
2160 2165 2170 2175 6529

C L G F G S G H F R C D S S R W  
TGC TTA GGC TTT GGA AGT GGT CAT TTC AGA TGT GAT TCA TCT AGA TGG  
2180 2185 2190 6577

C H D N G V N Y K I G E K W D R  
TGC CAT GAC AAT GGT GTG AAC TAC AAG ATT GGA GAG AAG TGG GAC CGT  
2195 2200 2205 6625

FIGURE 1-26

Q G E N G Q M S C T C L G N G	6673
CAG GGA GAA AAT GGC CAG ATG ATG AGC TGC ACA TGT CTT GGG AAC GGA	
2210 2215 2220	
K G E F K C D P H E A T C Y D D	6721
AAA GGA GAA TTC AAG TGT GAC CCT CAT GAG GCA ACG TGT TAC GAT GAT	
2225 2230 2235	
G K T Y H V G E Q W Q K E Y L G	6769
GGG AAG ACA TAC CAC GTA GGA GAA CAG TGG CAG AAG GAA TAT CTC GGT	
2240 2245 2250 2255	
A I C S C T C F G G Q R G W R C	6817
GCC ATT TGC TCC TGC ACA TGC TGC TTT GGA GGC CAG CGG GGC TGG CGC TGT	
2260 2265 2270	
D N C R R P G G E P S P E G T T	6865
GAC AAC TGC CGC AGA CCT GGG GGT GAA CCC AGT CCC GAA GGC ACT ACT	
2275 2280 2285	

26/86

27/86

FIGURE 1-27

G	Q	S	Y	N	Q	Y	S	Q	R	Y	H	Q	R	T	N		
GGC	CAG	TCC	TAC	AAC	CAG	TAT	TCT	CAG	AGA	TAC	CAT	CAG	AGA	ACA	AAC	6913	
		2290					2295					2300					
T	N	V	N	C	P	I	E	C	F	M	P	L	D	V	Q		
ACT	AAT	GTT	AAT	TGC	CCA	ATT	GAG	TGC	TTC	ATG	CCT	TTA	GAT	GTA	CAG	6961	
		2305				2310					2315						
A	D	R	E	D	S	R	E										
GCT	GAC	AGA	GAA	GAT	TCC	CGA	GAG	TAA	ATC	ATC	TTT	CCA	ATC	CAG	AGG	7009	
		2320			2325					2330					2335		
AAC	AAG	CAT	GTC	TCT	CTG	CCA	AGA	TCC	ATC	TAA	ACT	GGA	GTG	ATG	TTA	7057	
					2340				2345					2350			
GCA	GAC	CCA	GCT	TAG	AGT	TCT	TCT	TTC	TTT	CTT	AAG	CCC	TTT	GCT	CTG	7105	
			2355					2360					2365				
GAG	GAA	GTT	CTC	CAG	CTT	CAG	CTC	AAC	TCA	CAG	CTT	CTC	CAA	GCA	TCA	7153	
		2370					2375					2380					

FIGURE 1-28

CCC TGG GAG TTT CCT GAG GGT TTT CTC ATA AAT GAG GGC TGC ACA TTG 7201  
2385 2390 2395

CCT GTT CTG CTT CGA AGT ATT CAA TAC CGC TCA GTA TTT TAA ATG AAG 7249  
2400 2405 2410 2415

TGA TTC TAA GAT TTG GTT TGG GAT CAA TAG GAA AGC ATA TGC AGC CAA 7297  
2420 2425 2430 28/86

CCA AGA TGC AAA TGT TTT GAA ATG ATA TGA CCA AAA TTT TAA GTA GGA 7345  
2435 2440 2445

AAG TCA CCC AAA CAC TTC TGC TTT CAC TTA AGT GTC TGG CCC GCA ATA 7393  
2450 2455 2460

CTG TAG GAA CAA GCA TGA TCT TGT TAC TGT GAT ATT TTA AAT ATC CAC 7441  
2465 2470 2475

AGT ACT CAC TTT TTC CAA ATG ATC CTA GTA ATT GCC TAG AAA TAT CTT 7489  
2480 2485 2490 2495

FIGURE 1-29

TCT CTT ACC TGT TAT TTA TCA ATT TTT CCC AGT ATT TTT ATA CGG AAA 7537  
2500 2510

AAA TTG TAT TGA AAA CAC TTA GTA TGC AGT TGA TAA GAG GAA TTT GGT 7585  
2515 2520 2525

ATA ATT ATG GTG GGT GAT TAT TTT TTA TAC TGT ATG TGC CAA AGC TTT 7633  
2530 2535 2540

ACT ACT GTG GAA AGA CAA CTG TTT TAA TAA AAG ATT TAC ATT CCA CAA 7681  
2545 2550 2555

AAAAAAAAAA AAAAAAAAAA AAAA 7705

29/86

09492971.012700

# FIGURE 2A

## PAIR 1

#1 5'- AATTCATATGCAGGCACAGCAAAATGGTTTCAGCCCCAGTCCCCGGTGGCTGTCTAGTCAAAGCAAGCCCCGGTT -3'  
 #2 3'- GTATACGTCCGTGTCGTTTACCCTGCGGGGTCAGGGGCCACCGACAGTCAGTTTCGTTTCGGGCCAACAAATA -5'

## PAIR 2

#3 5'- GTTATGACAATGGAAACACTATCAGATAAATCAACAGTGGGAGCGGACCTACCTAGGTAATGTGTG -3'  
 #4 3'- CTGTTACCTTTTGTGATAGTCTATTTAGTTGTACCCCTCGCCTGGATGGATCCATT -5'

## PAIR 3

#5 5'- GTTTGTACTTGTATGGAGGAGCCGAGGTTTAACTGCGAAAGTAAACCTGAAGCT -3'  
 #6 3'- ACACAACCAACATGAACAATACCTCCTTCGGCTCCAAATTTGACGCTTTCATTTGGACTTCGACTTCTCT -5'

## PAIR 4

#7 5'- GAAGAGACTTGTGACAAGTACACTGGGAACACTTACCGAGTGGGTGACACTTATGAGCGTCCCTAA -3'  
 #8 3'- GAACGAAACTGTTCATGTGACCCCTTGTGAATGGCTCACCCACTGTGAATACTCGCAG -5'

# FIGURE 2B

31/86

## PAIR 5

#9 5'- GACTCCATGATCTGGGACTGTACCTGCATCGGGGCTGGCGAGGGAGAAATAGCTGTACC -3'  
 #10 GATTCTGAGTACTAGACCCCTGACATGGACGTAGCCCCGACCCGCTCCCTCTTATTC -5'

## PAIR 6

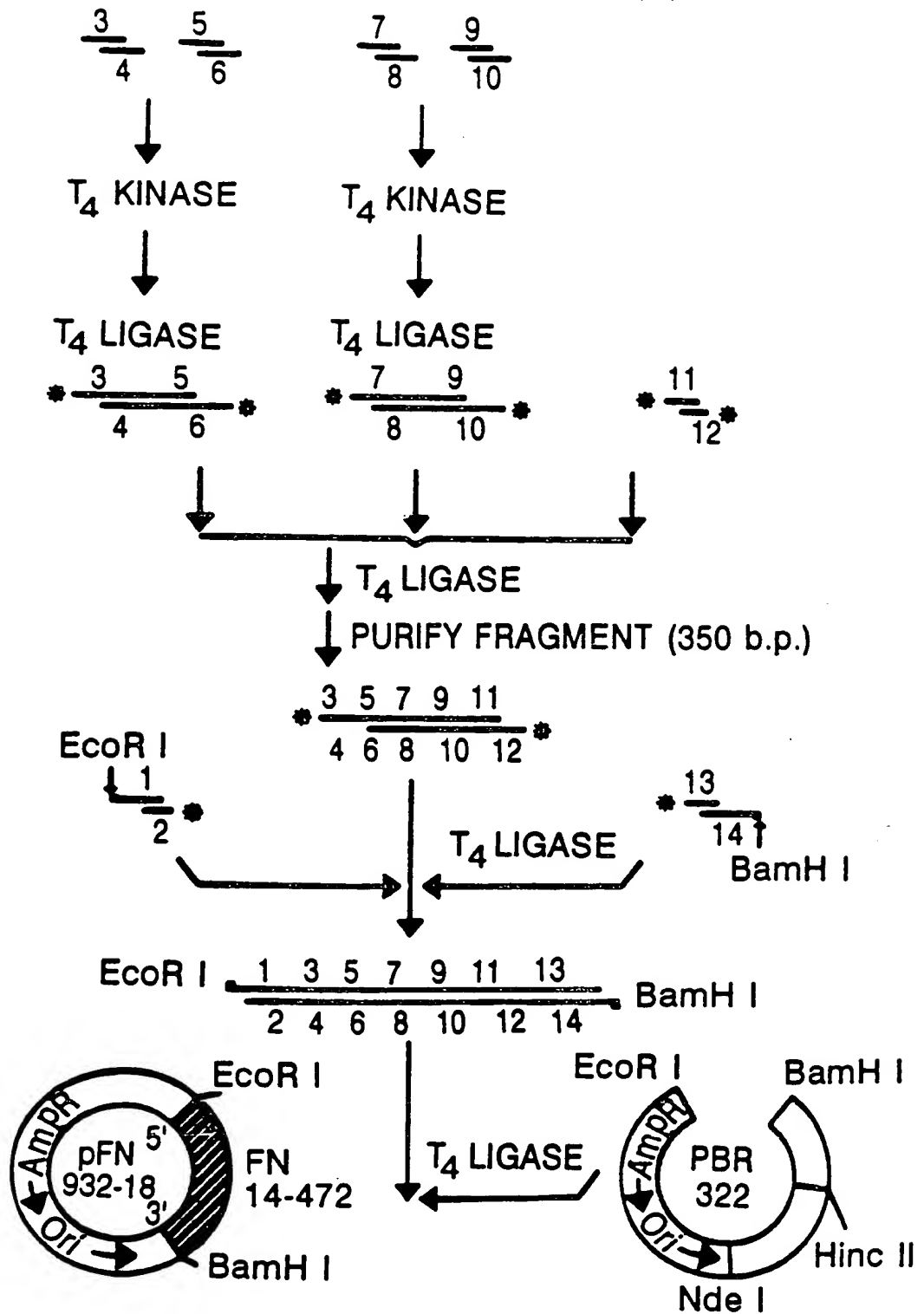
#11 5'- ATCGCCAAACGCTGCCATGAAGGGGTCAGTCCTACCAGATTGGTGACACCTGGAGGAGACCACATGAGACT -3'  
 #12 3'- GACATGGTAGCGTTTGGACGGTACTTCCCCCAGTCAGGATGTCATAACCACTGTGGACCTCCTCTGGTGTACTCTGACCCACCAA-5'

## PAIR 7

#13 5'- GGTGGTTACATGTTAGAGTGTGTGTCTTGGTAATGGAAAAGGAGAATGGACCTGCAAGCCCATAGCTGAG -3'  
 #14 3'- TGTACAACTCTCACACACACAGAACCATTAACCTTTTCCCTCTTACCTGGACGTTCCGGGTATCGACTCCCTAG -5'

32/86  
FIGURE 3

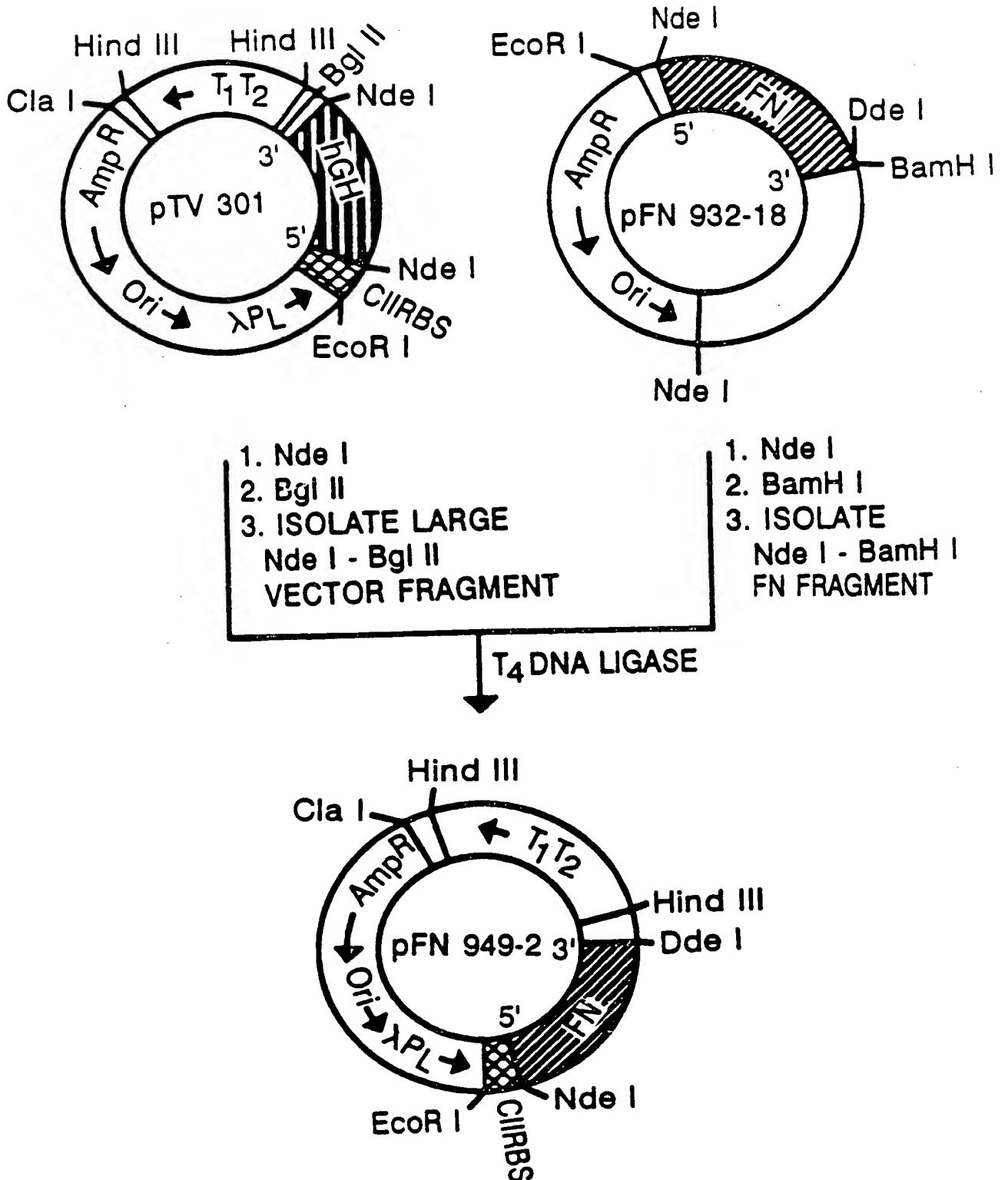
SYNTHESIS OF F.N. GENE (14-472 b.p.)



002270" T 2626460

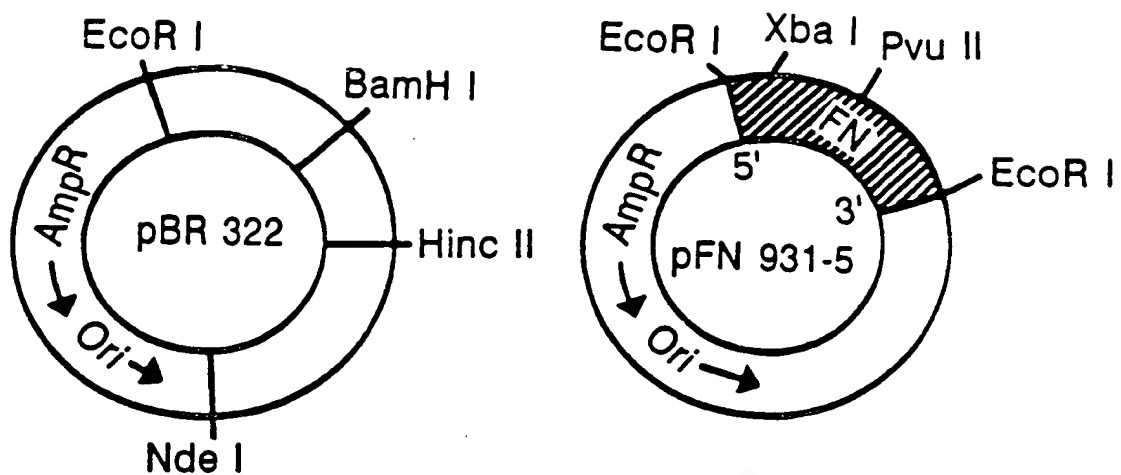


33/86  
FIGURE 4



002210" T2626460

34/86  
FIGURE 5

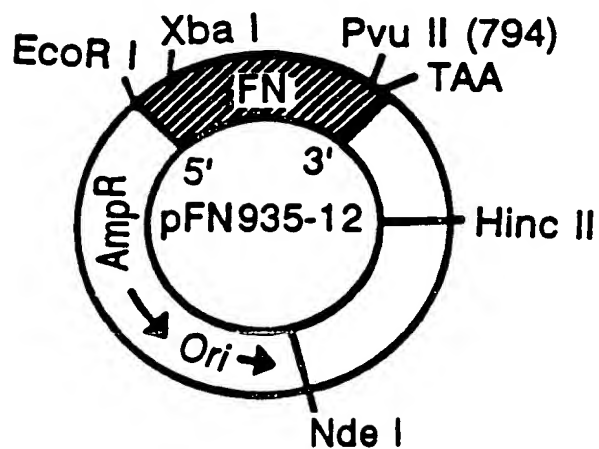


1. EcoR I
2. BamH I
3. ISOLATE LARGE  
EcoR I - BamH I FRAGMENT

1. EcoR I
2. Pvu II
3. ISOLATE LARGE  
EcoR I - Pvu II  
FN FRAGMENT

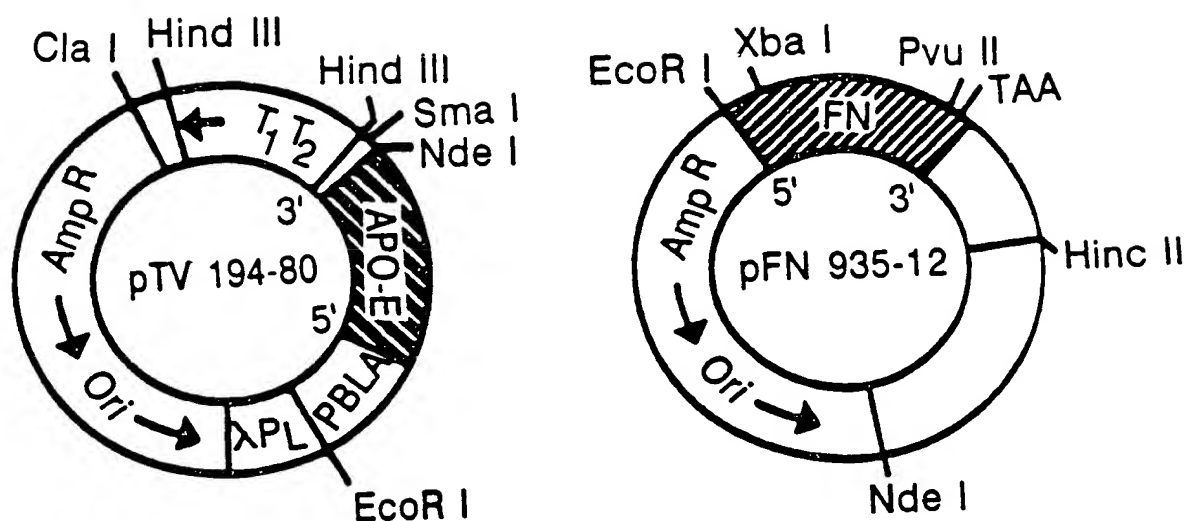
SYNTHETIC LINKER  
5'-CTGTTTAAGCA-3'  
3'-GACAAATTCGTCTAG-5'  
KINASE

T<sub>4</sub> DNA LIGASE



002270" T 2626460

35/86  
FIGURE 6



1. EcoR I
2. Sma I
3. ISOLATE LARGE  
EcoR I - Sma I FRAGMENT

1. EcoR I
2. Hinc II
3. ISOLATE  
EcoR I - Hinc II  
FN FRAGMENT

T<sub>4</sub> DNA LIGASE

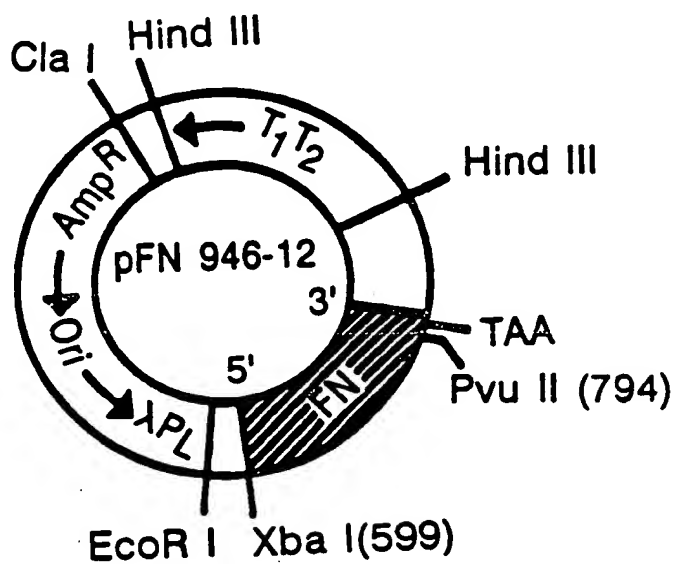
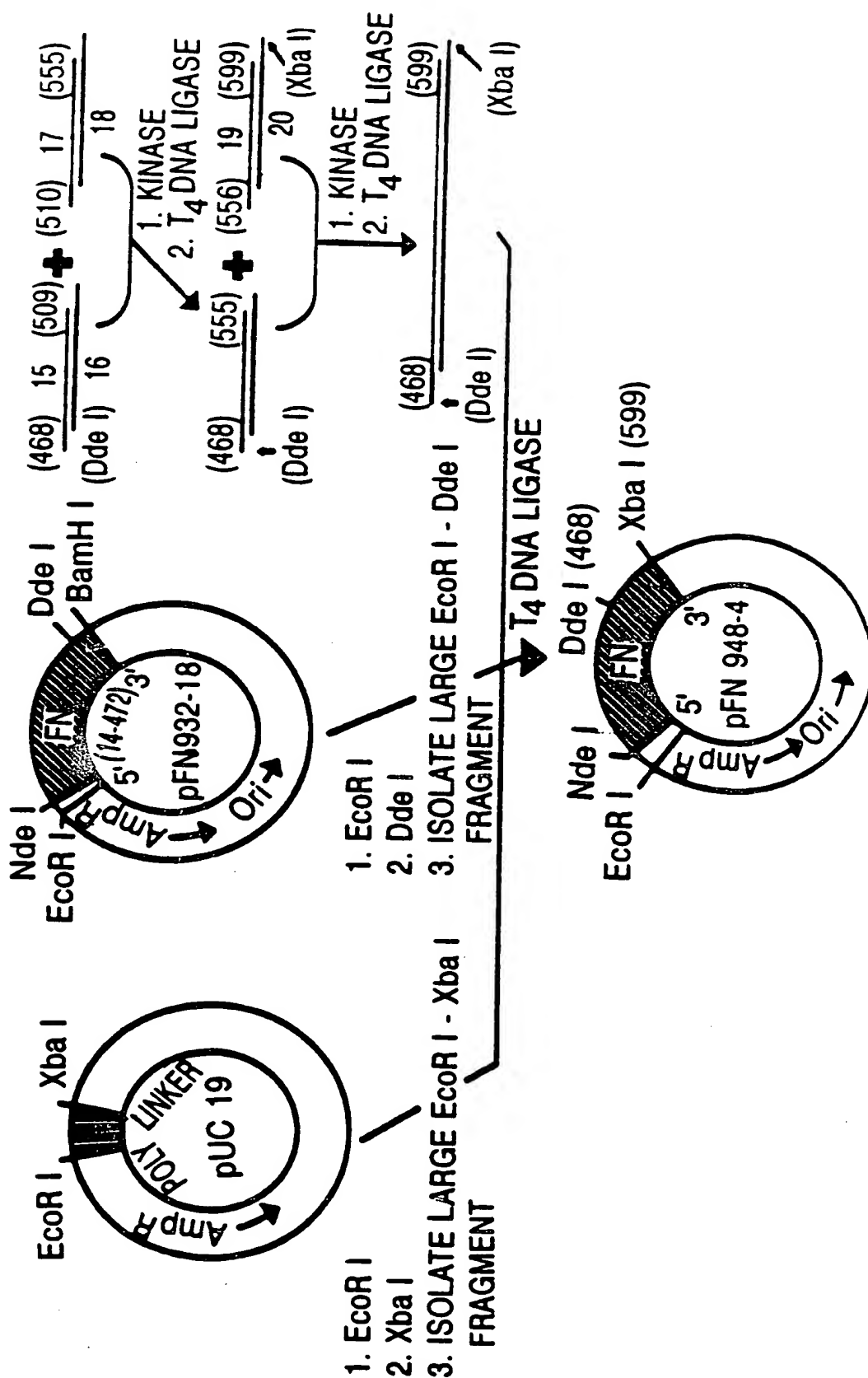
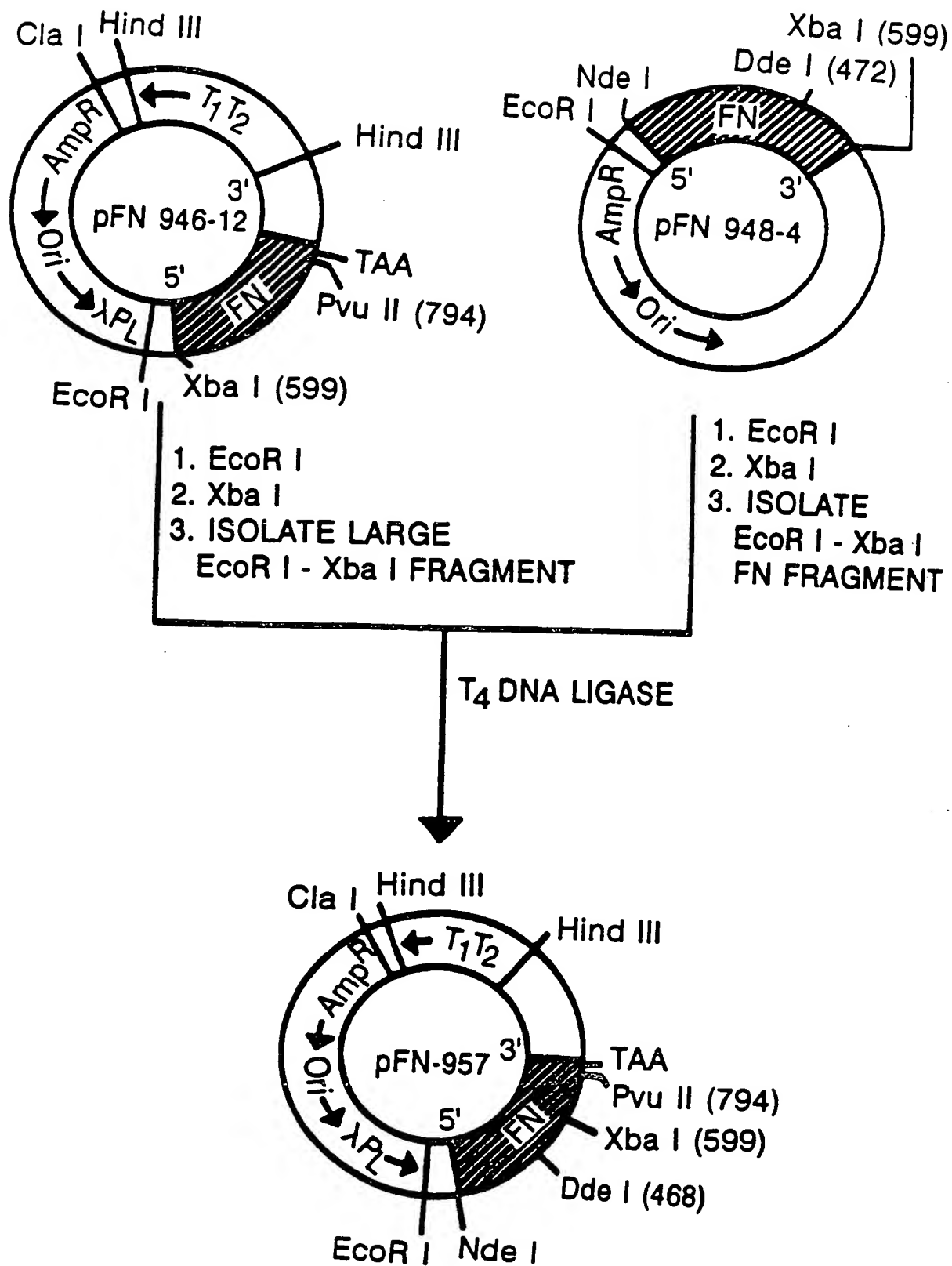


FIGURE 7

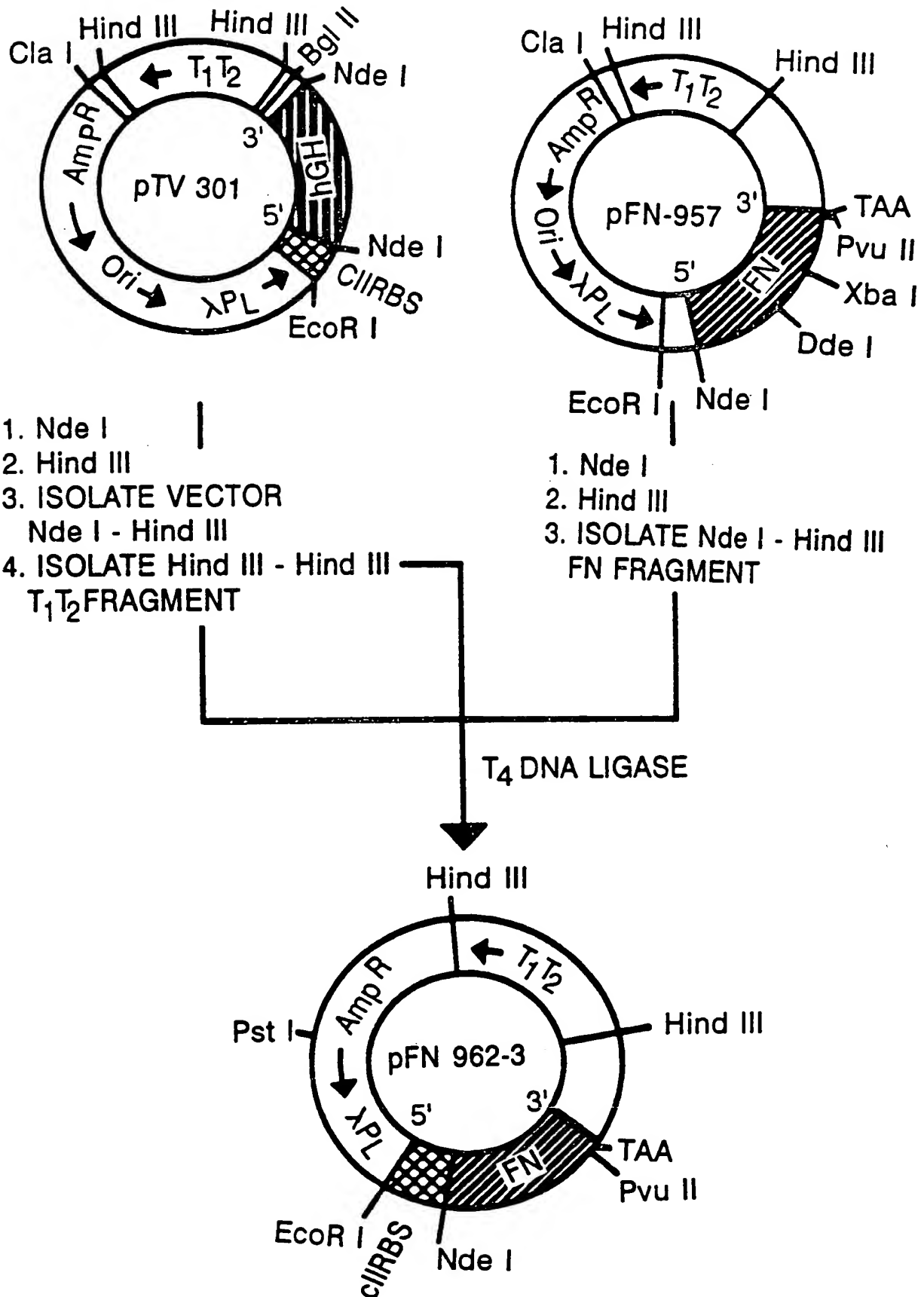


37/86  
FIGURE 8



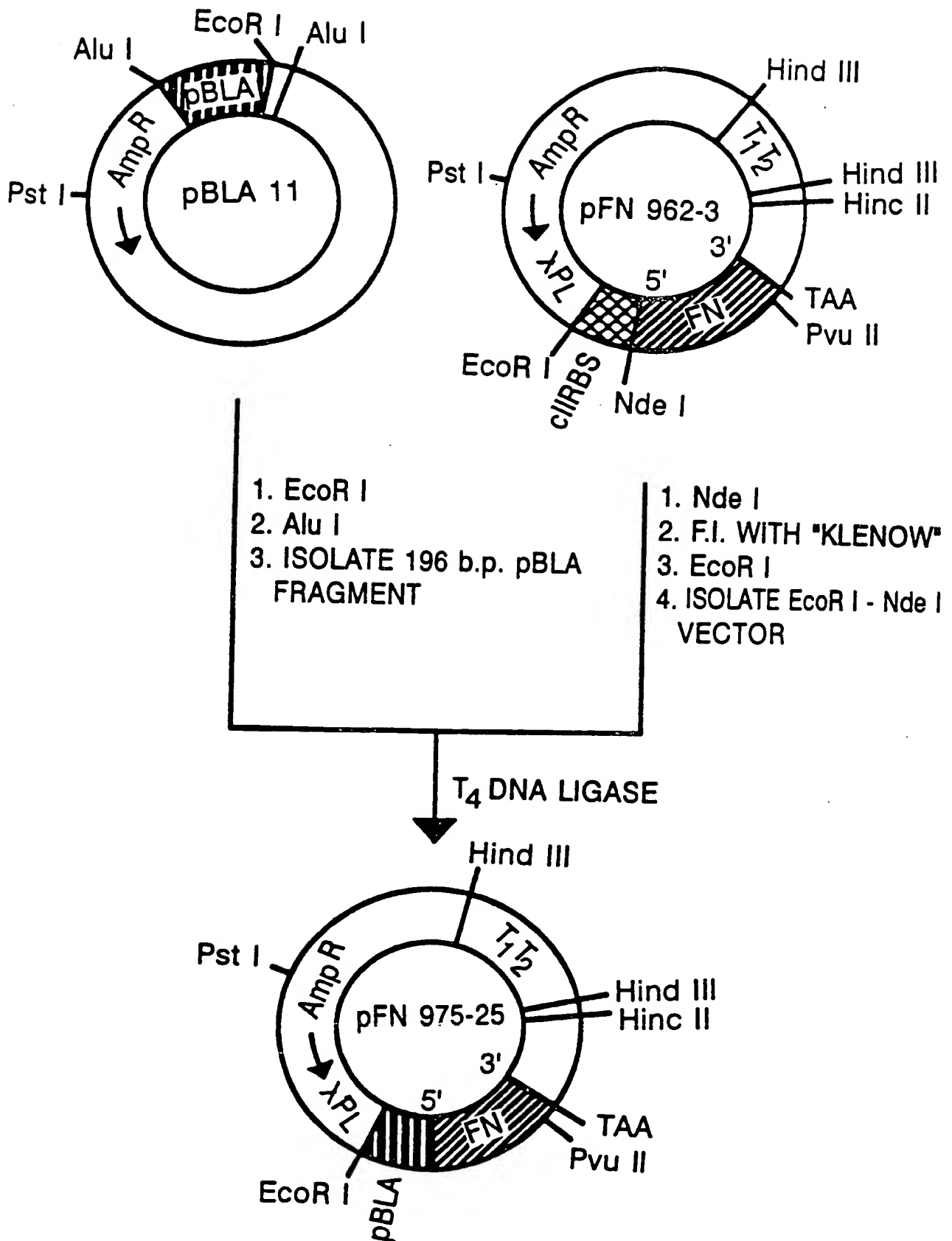
004257-012700

38/86  
FIGURE 9



00220-T-2626460

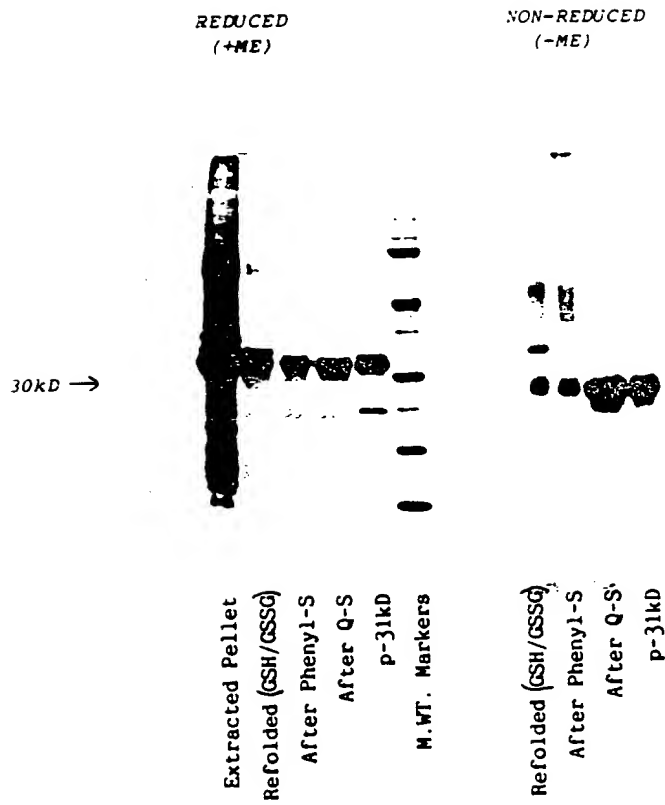
39/86  
FIGURE 10



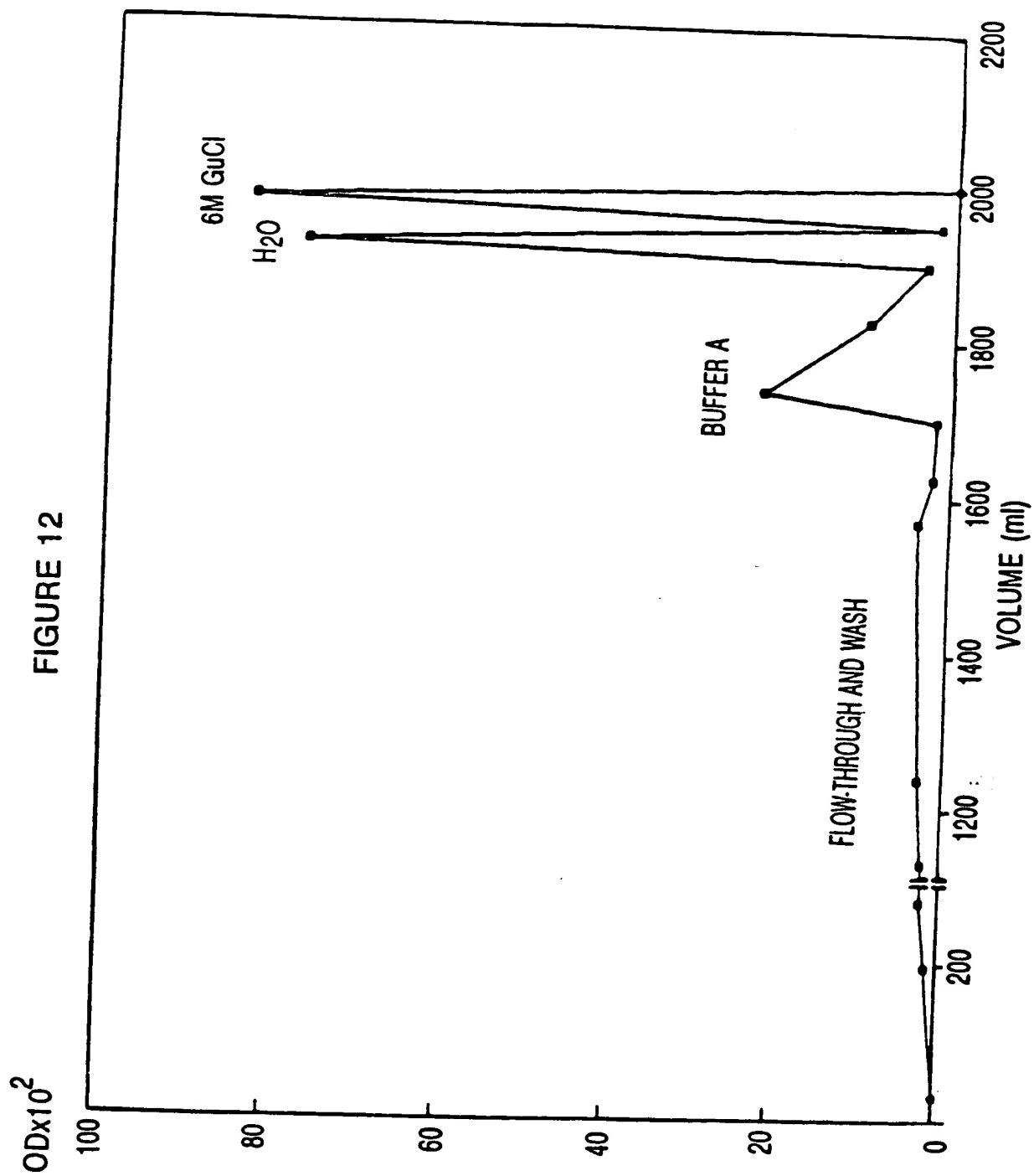
0049371.01700

40/86

FIGURE 11

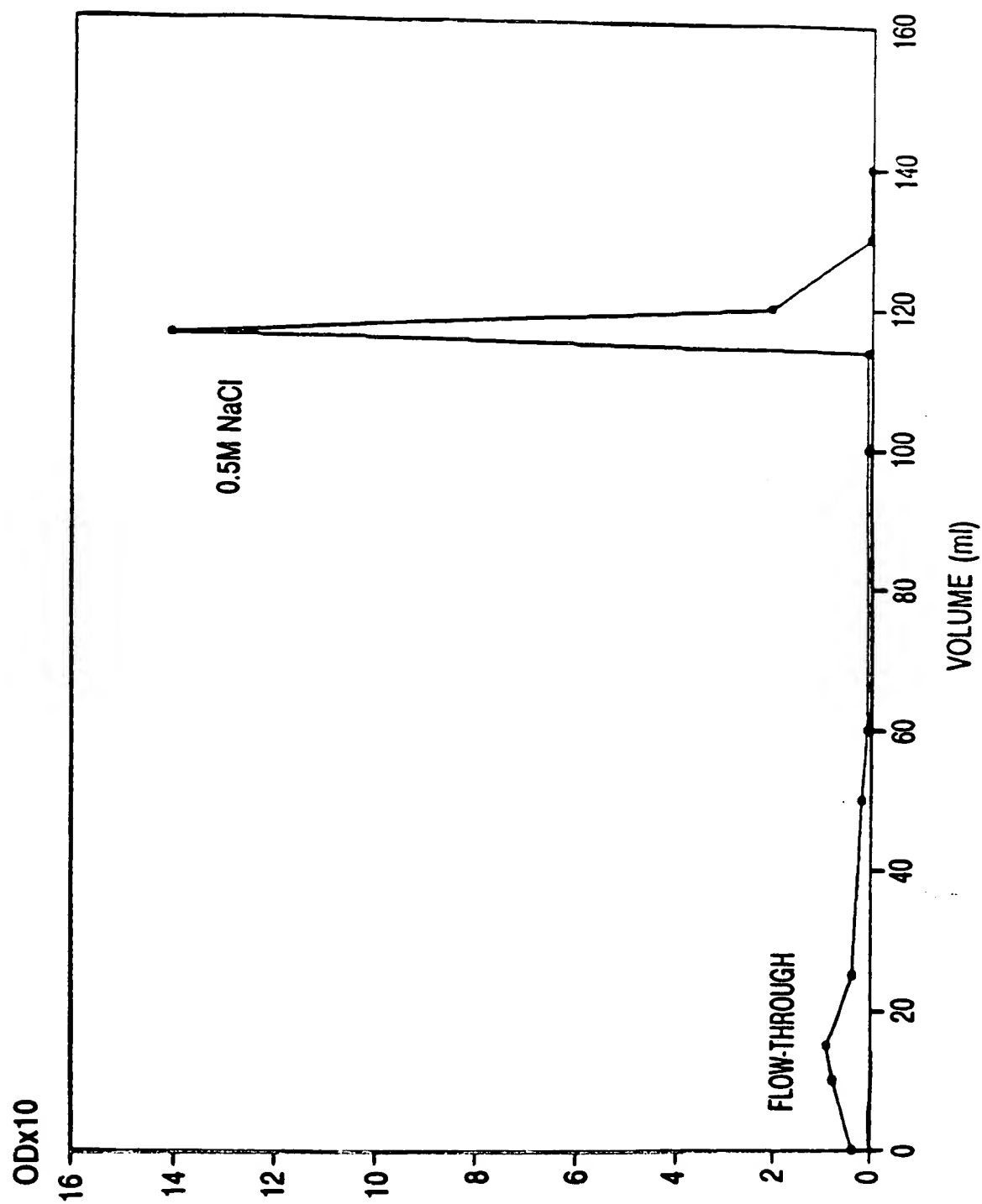






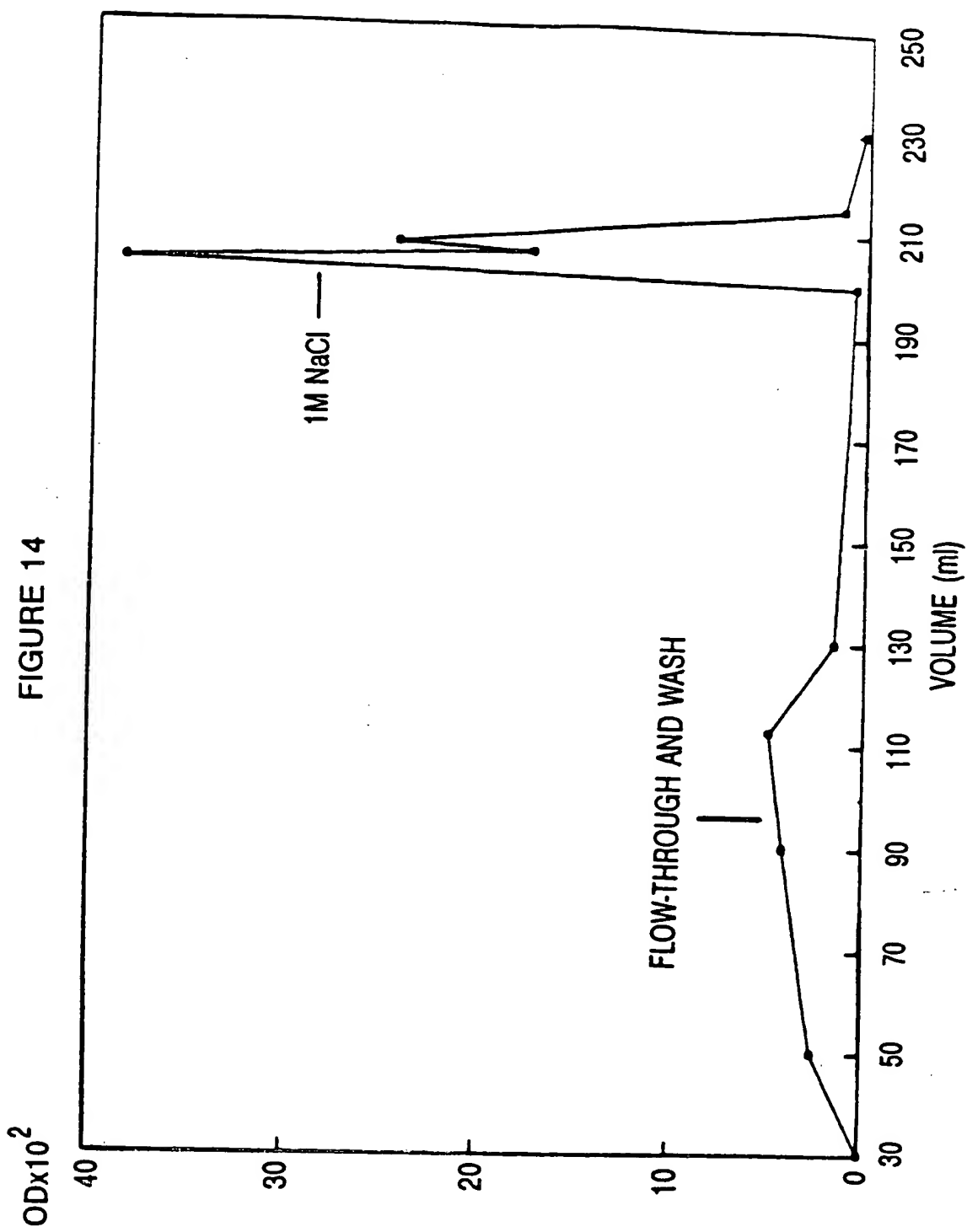
09492971.012700

FIGURE 13



09492971-012700

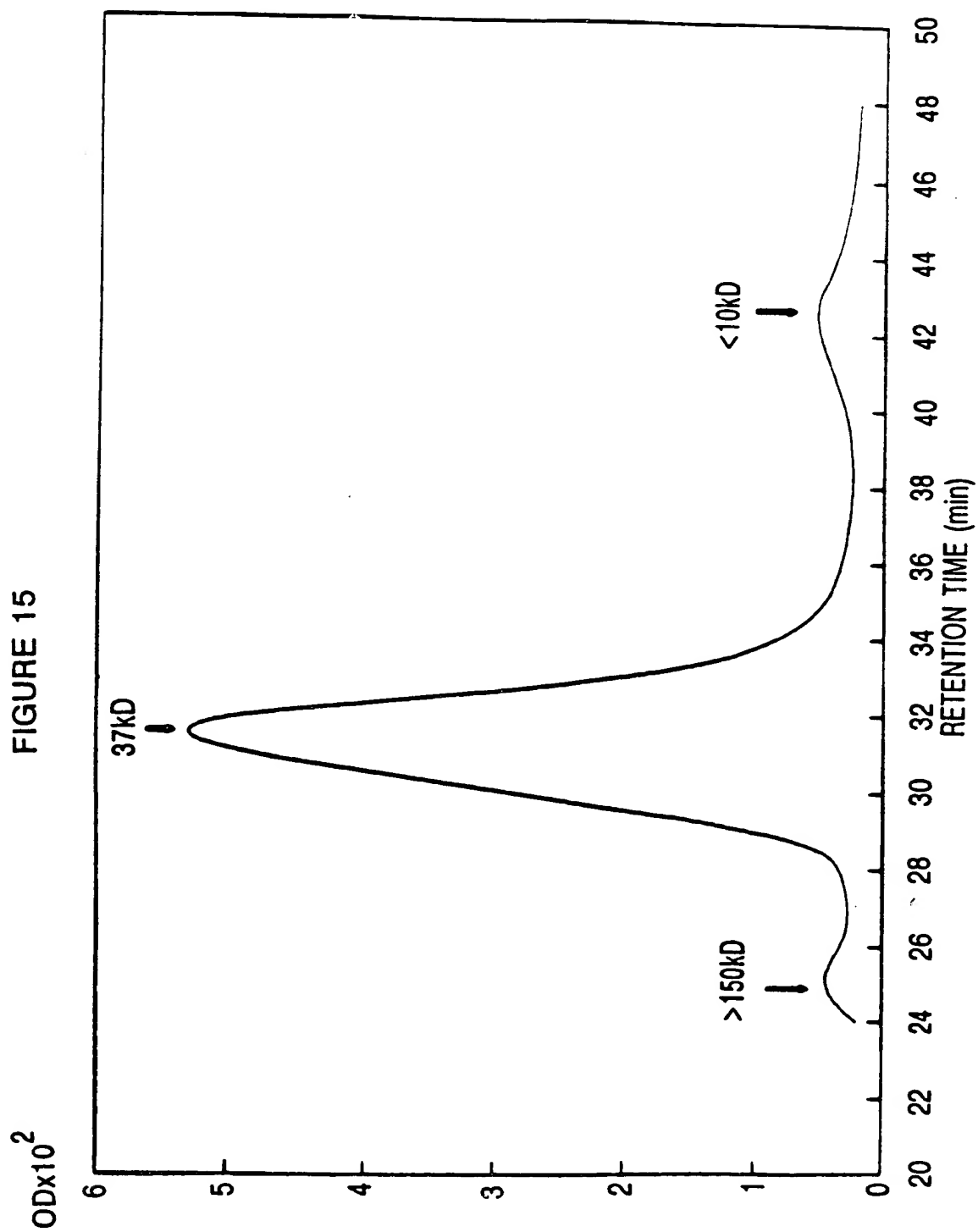
43/86



09492971.012700

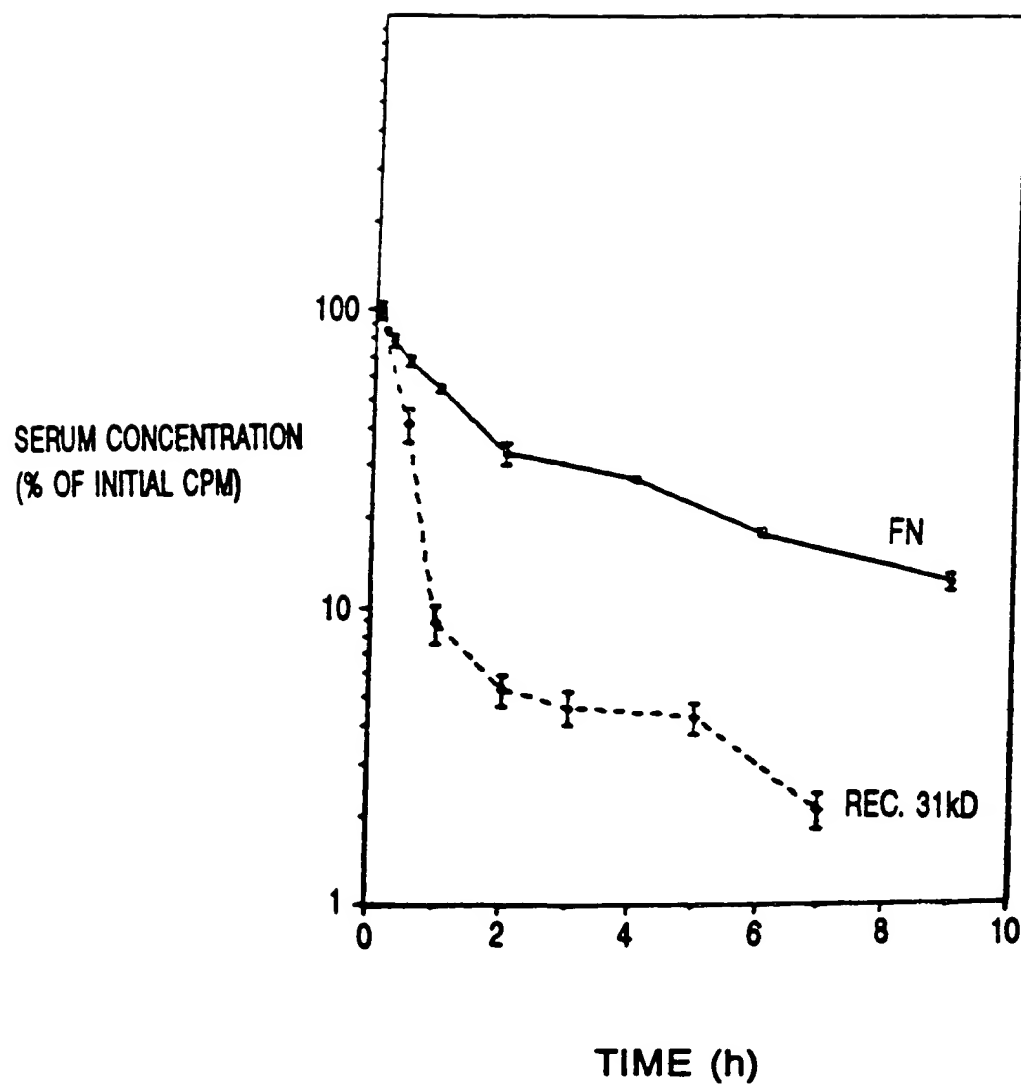
44/86

FIGURE 15



09492971.012700

45/86  
FIGURE 16



46/86  
FIGURE 17

I = Binding while clot formation  
II = Binding to preformed Fibrin clot

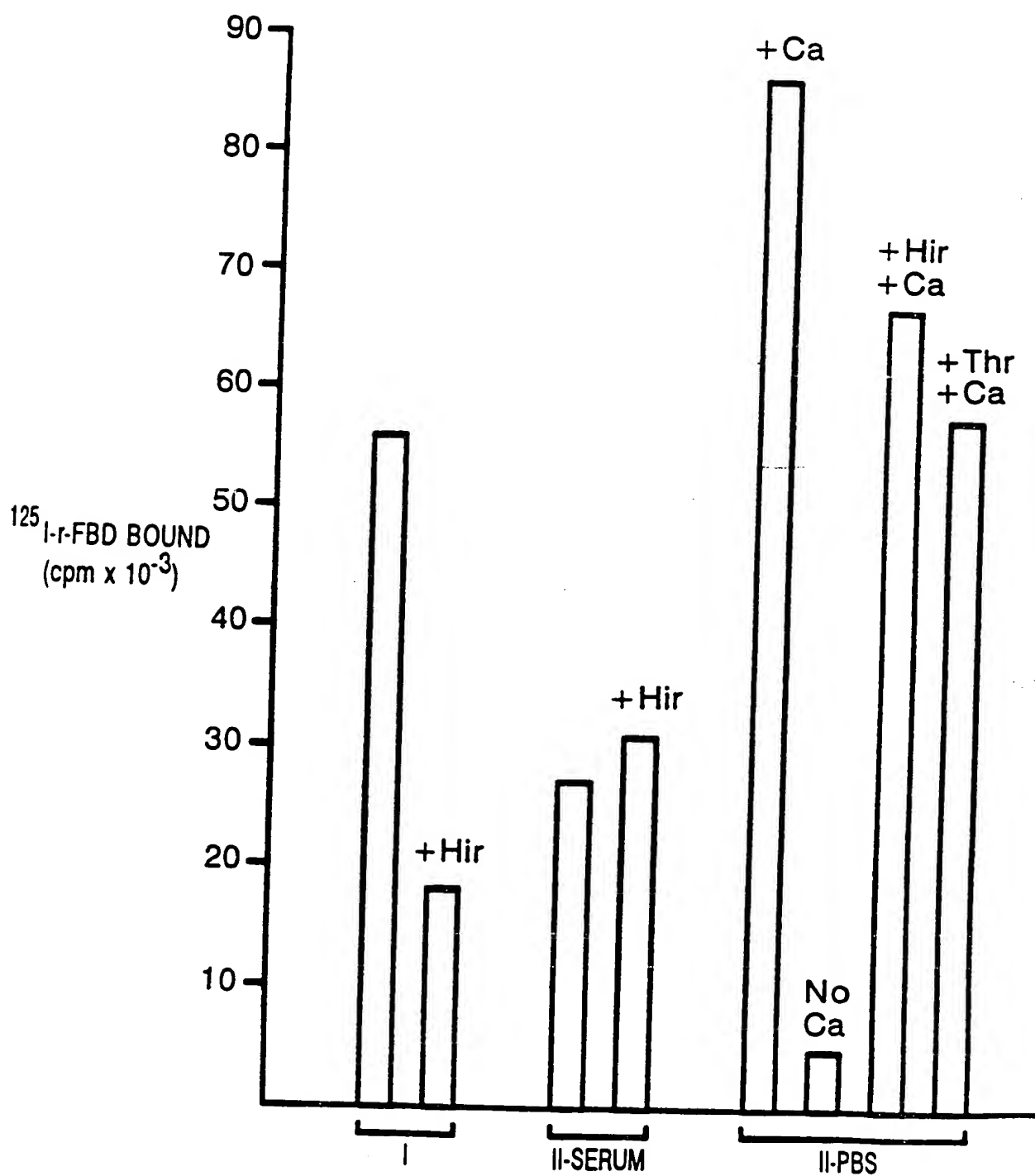
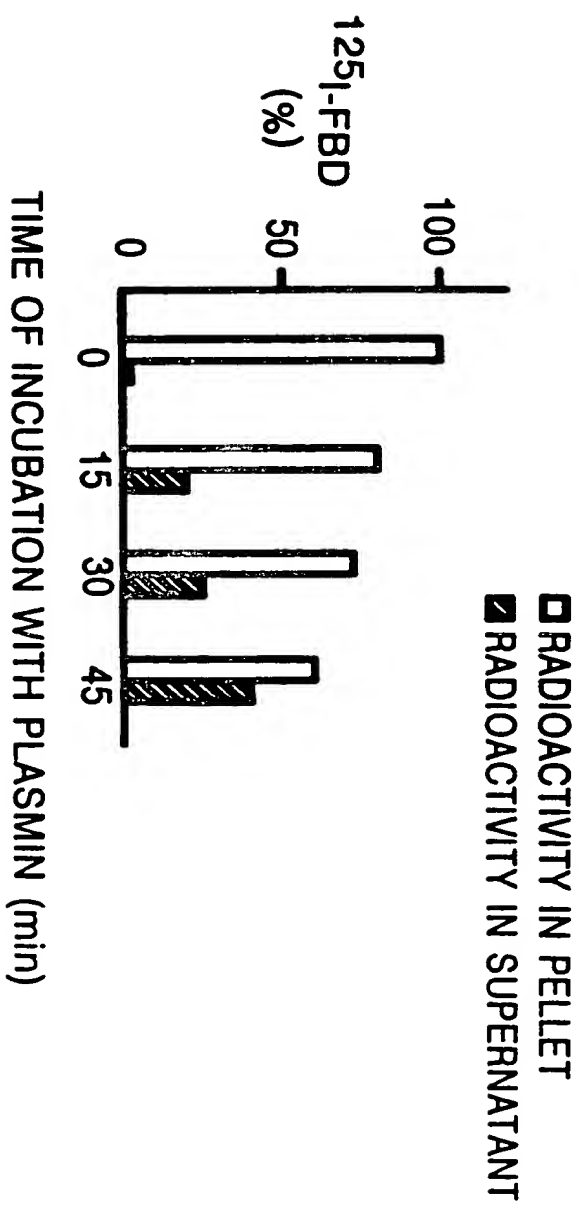


FIGURE 18

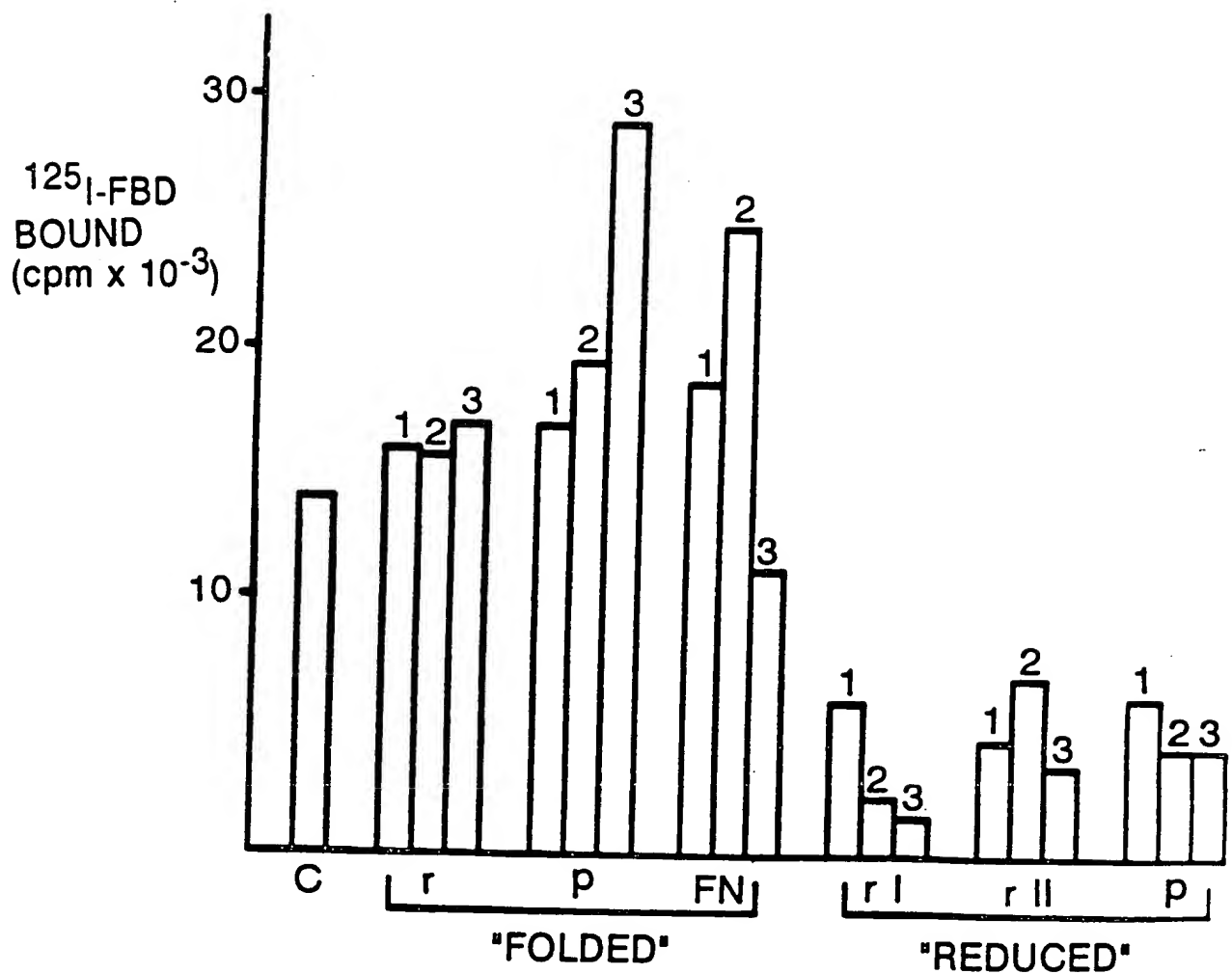


47/86

09492971.012700

48/86  
FIGURE 19

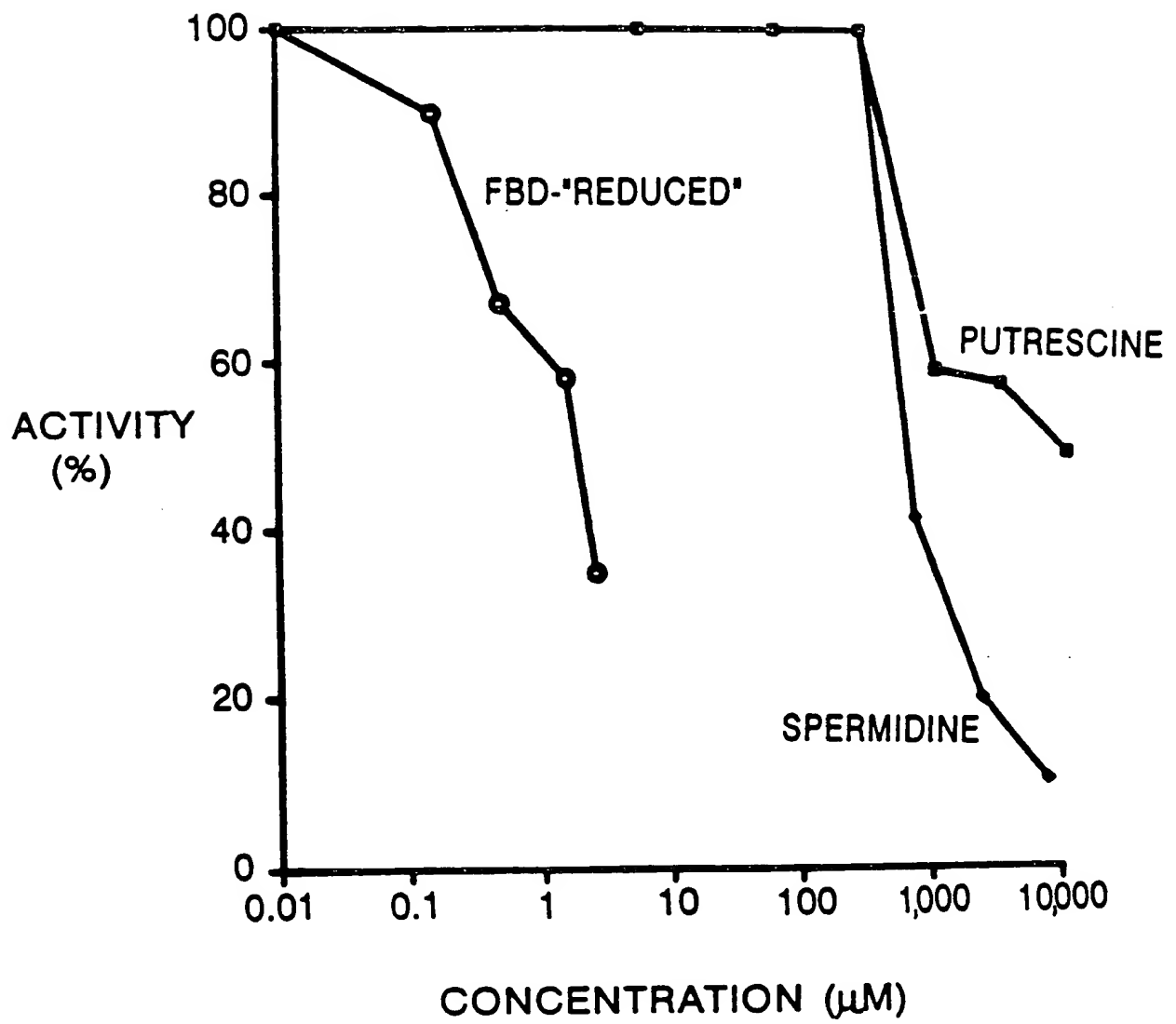
1 - 0.3  $\mu$ M Unlabelled competitors  
2 - 1.0  $\mu$ M  
3 - 3.0  $\mu$ M



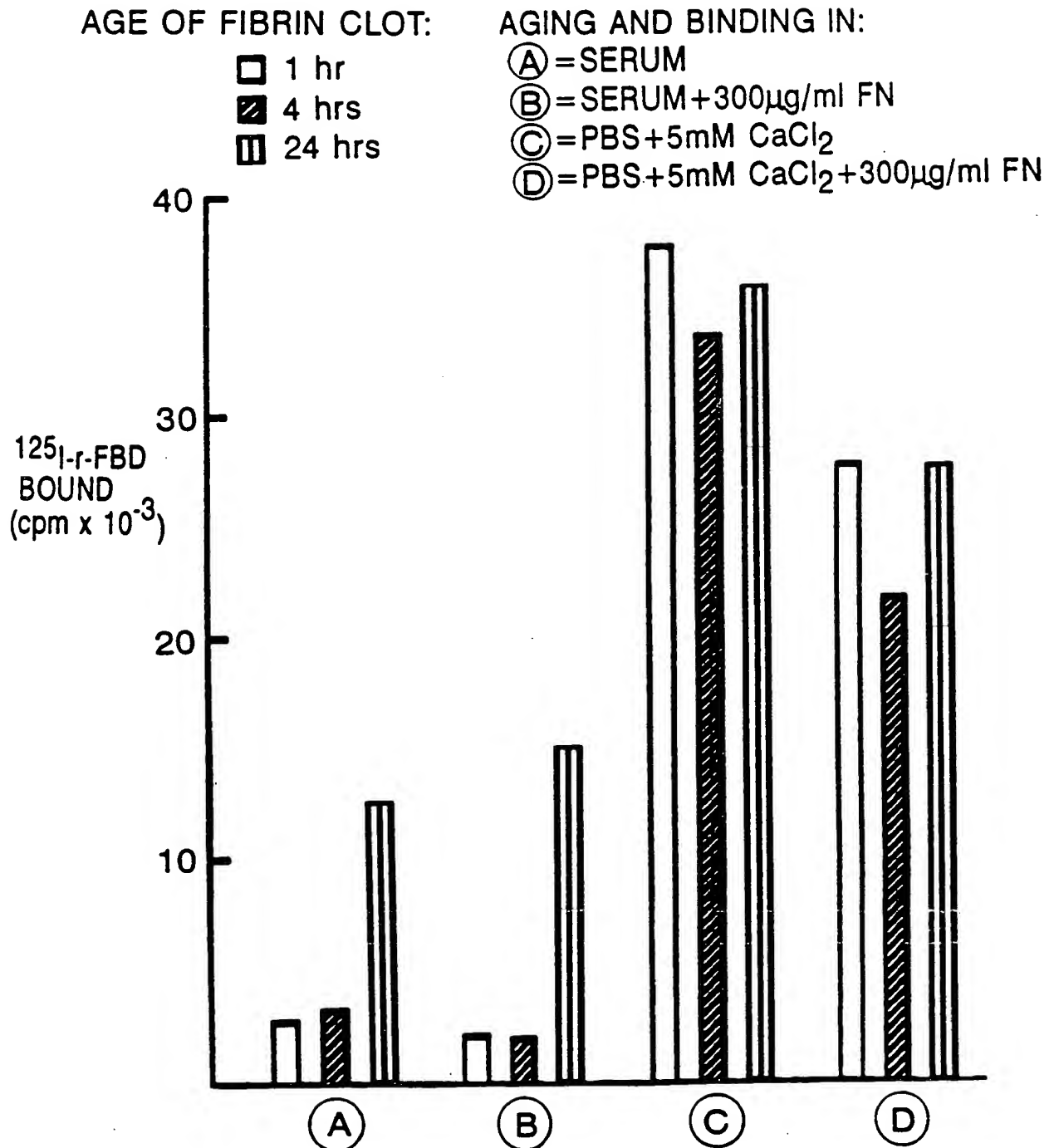


49/86

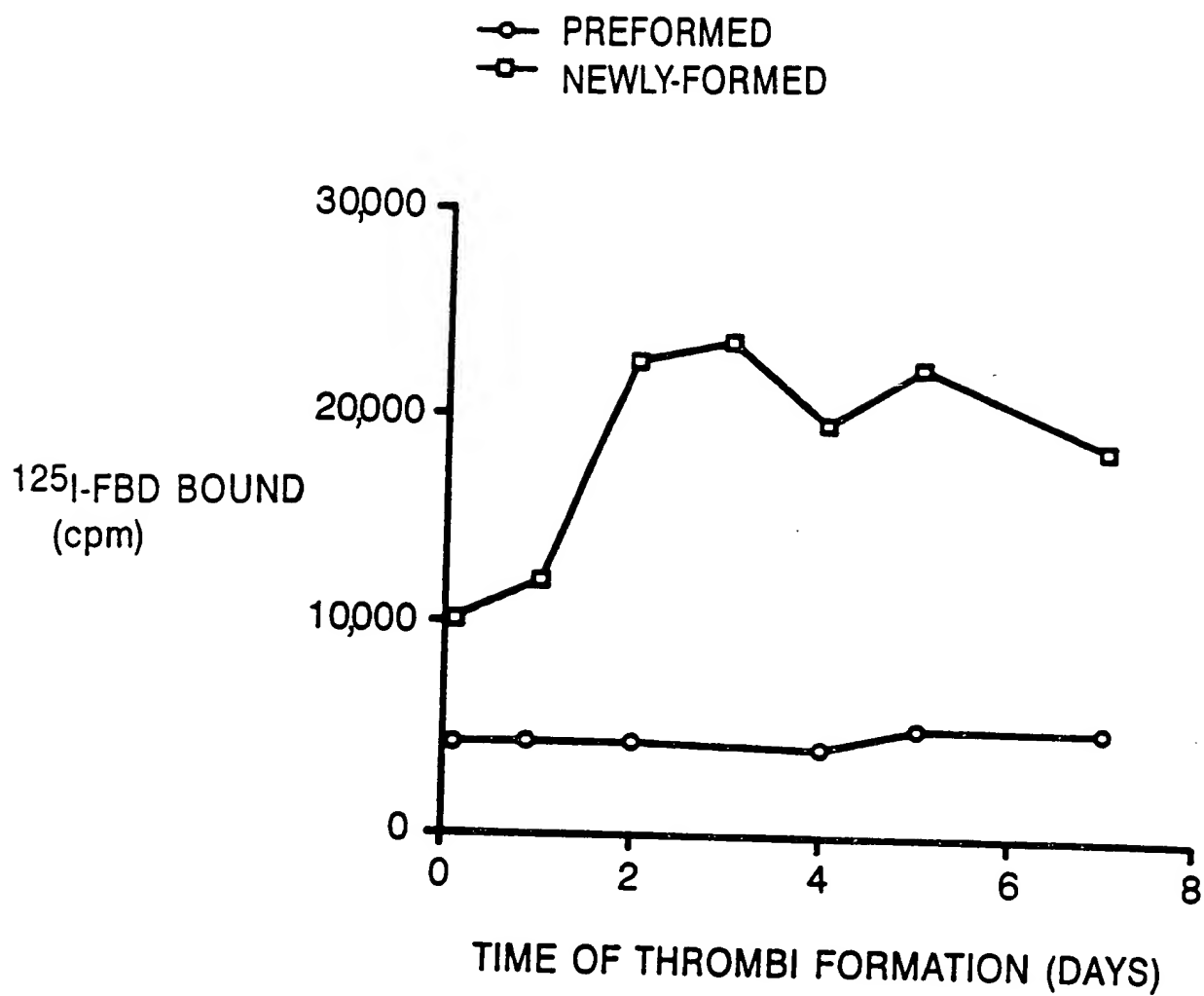
FIGURE 20



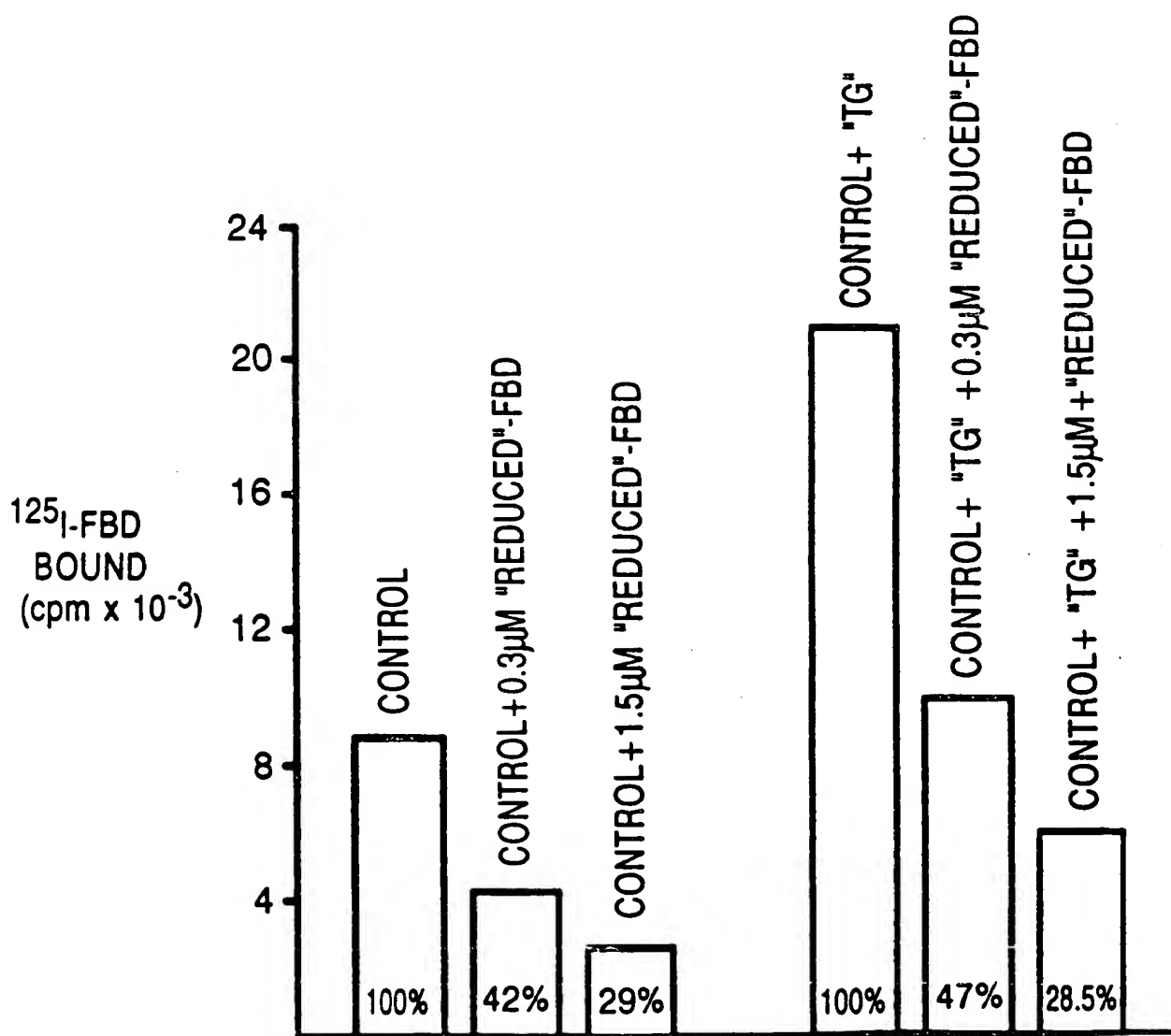
50/86  
FIGURE 21



51/86  
FIGURE 22

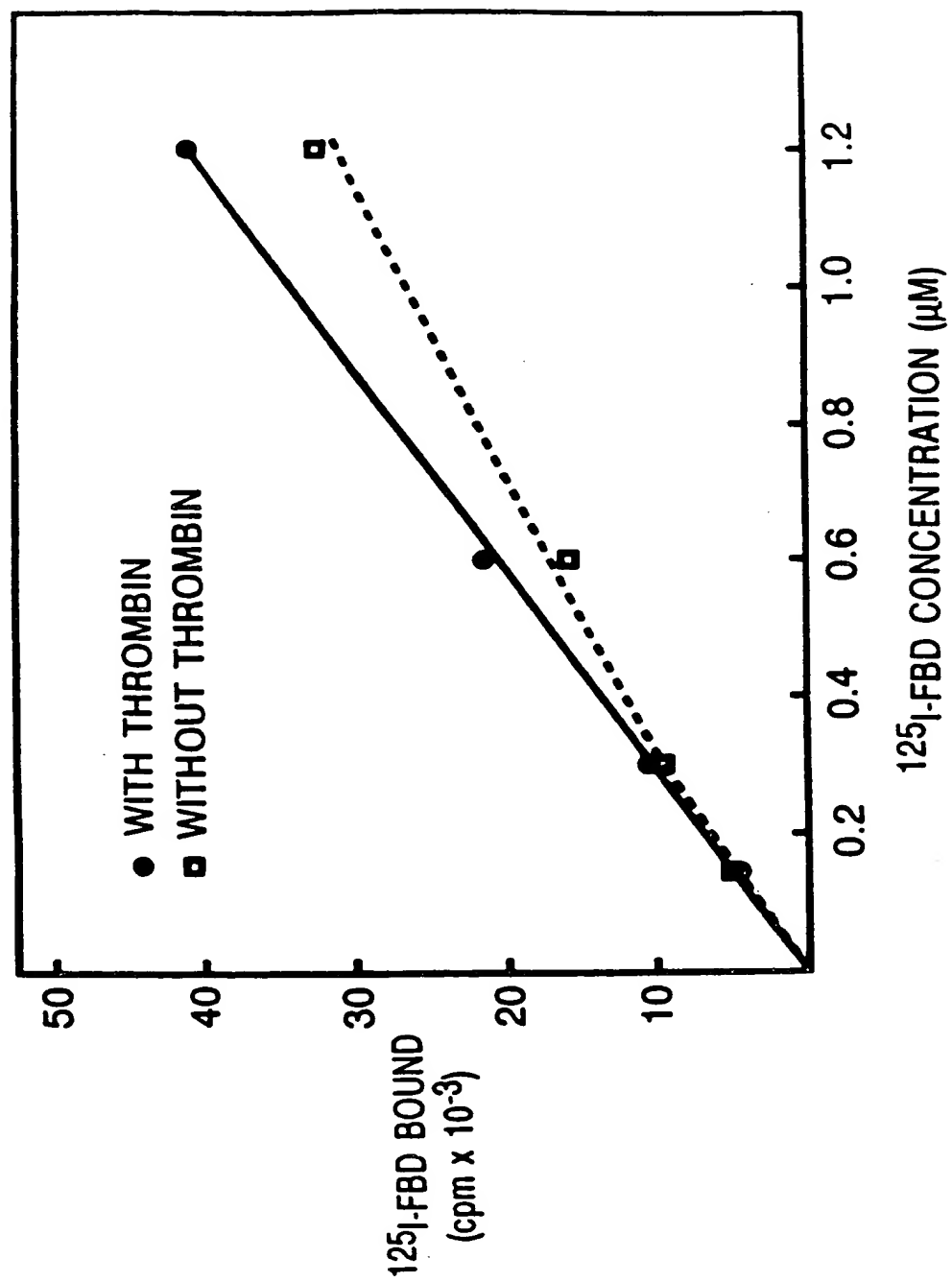


52/86  
FIGURE 23



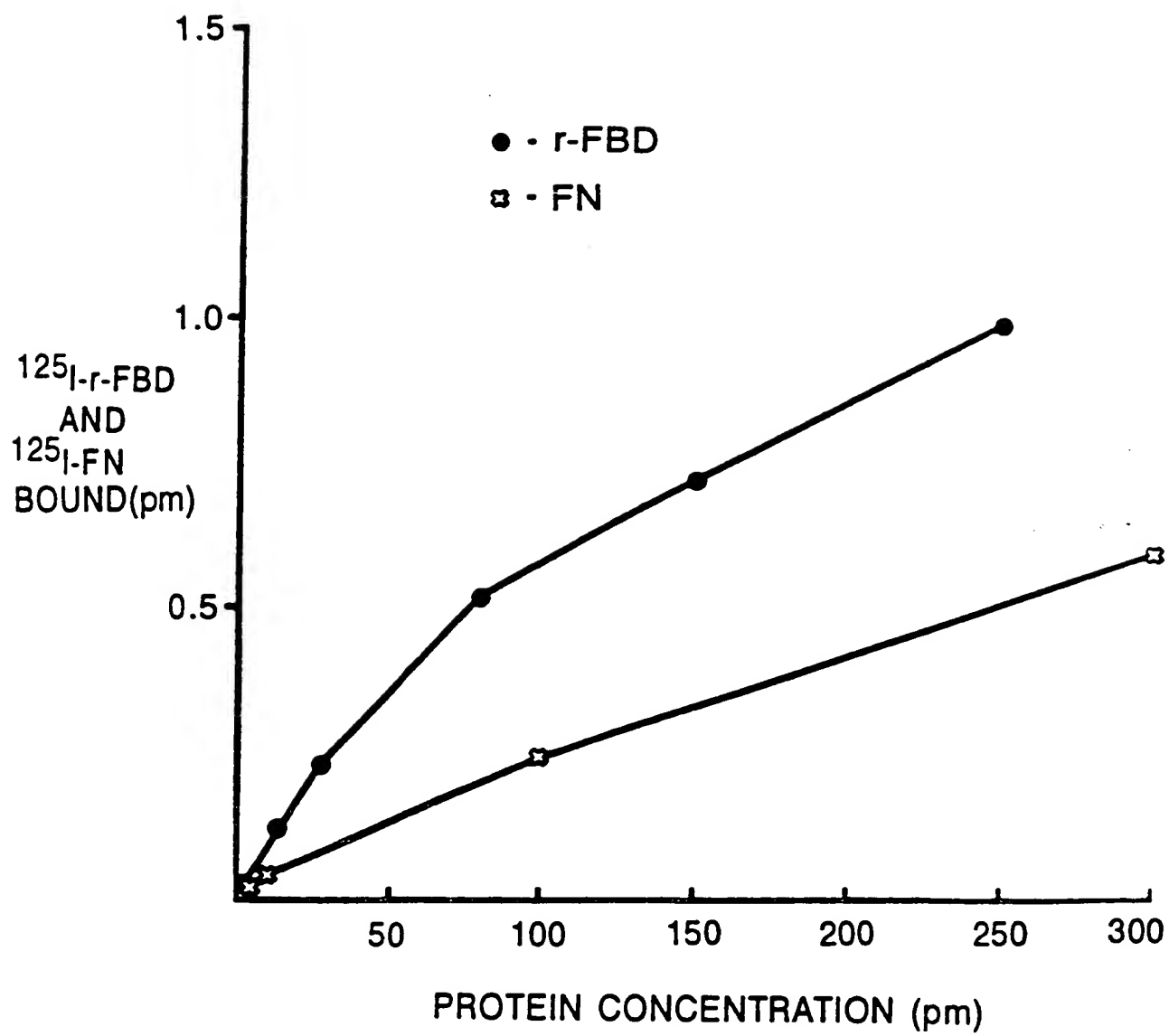
09492971-012700

FIGURE 24



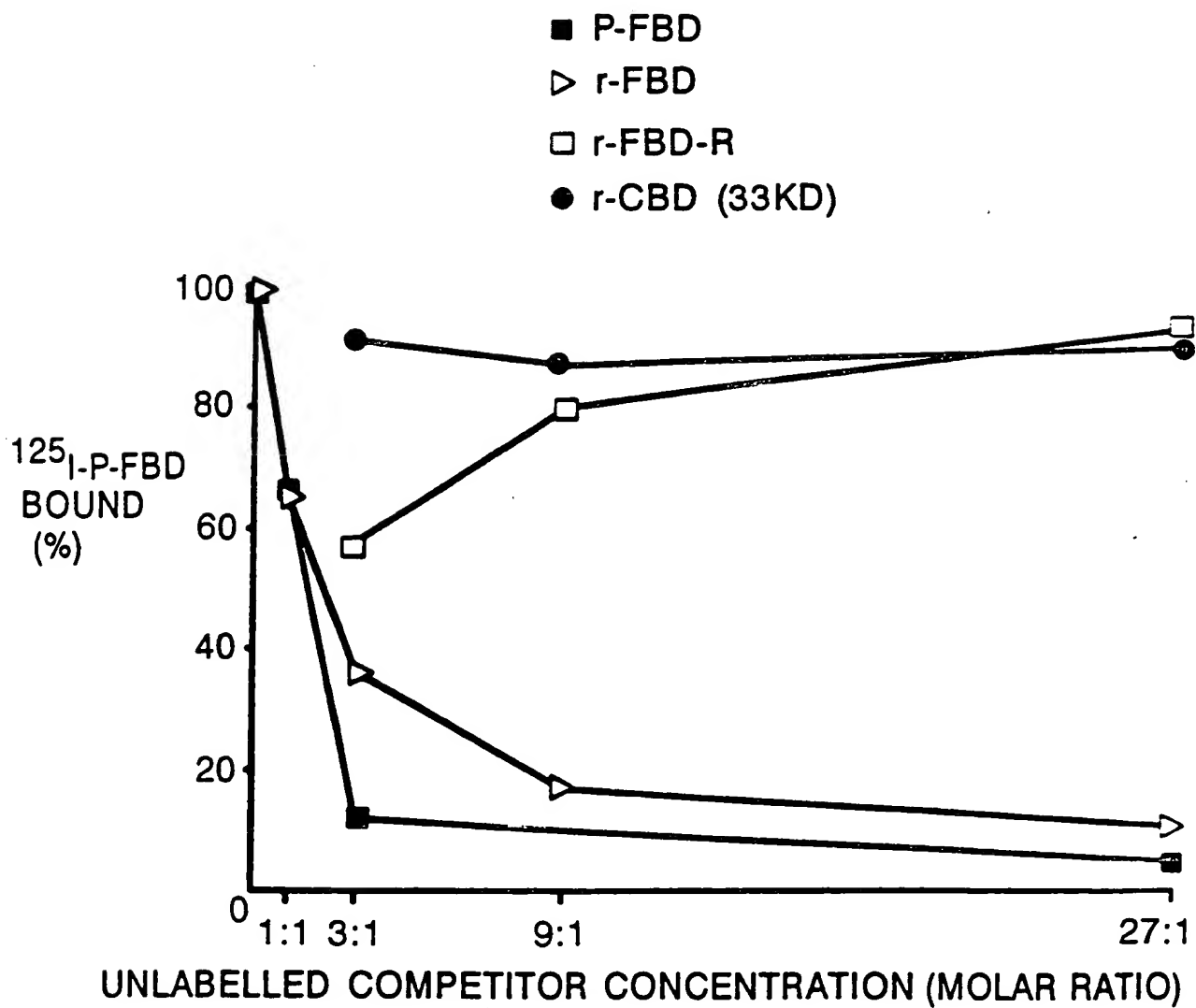
54/86

FIGURE 25



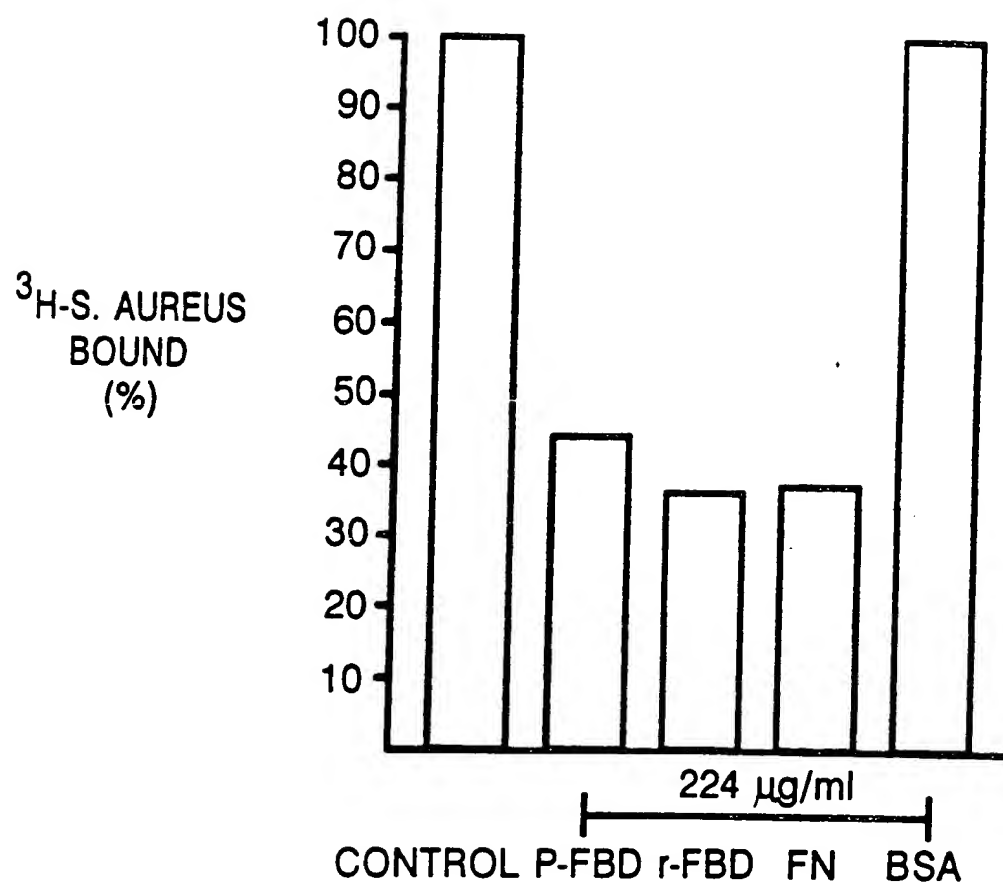
55/86

FIGURE 26



56/86

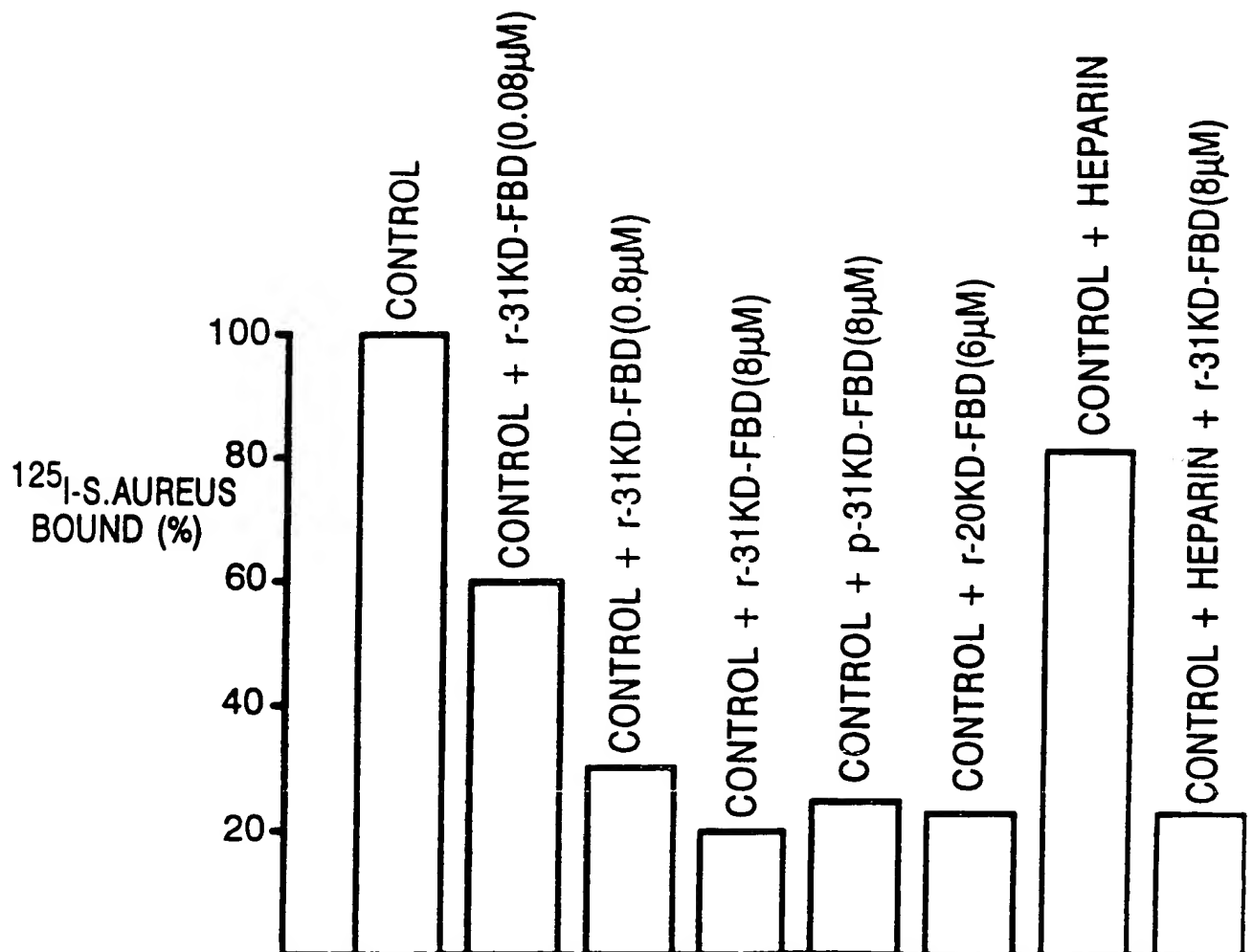
FIGURE 27





57/86

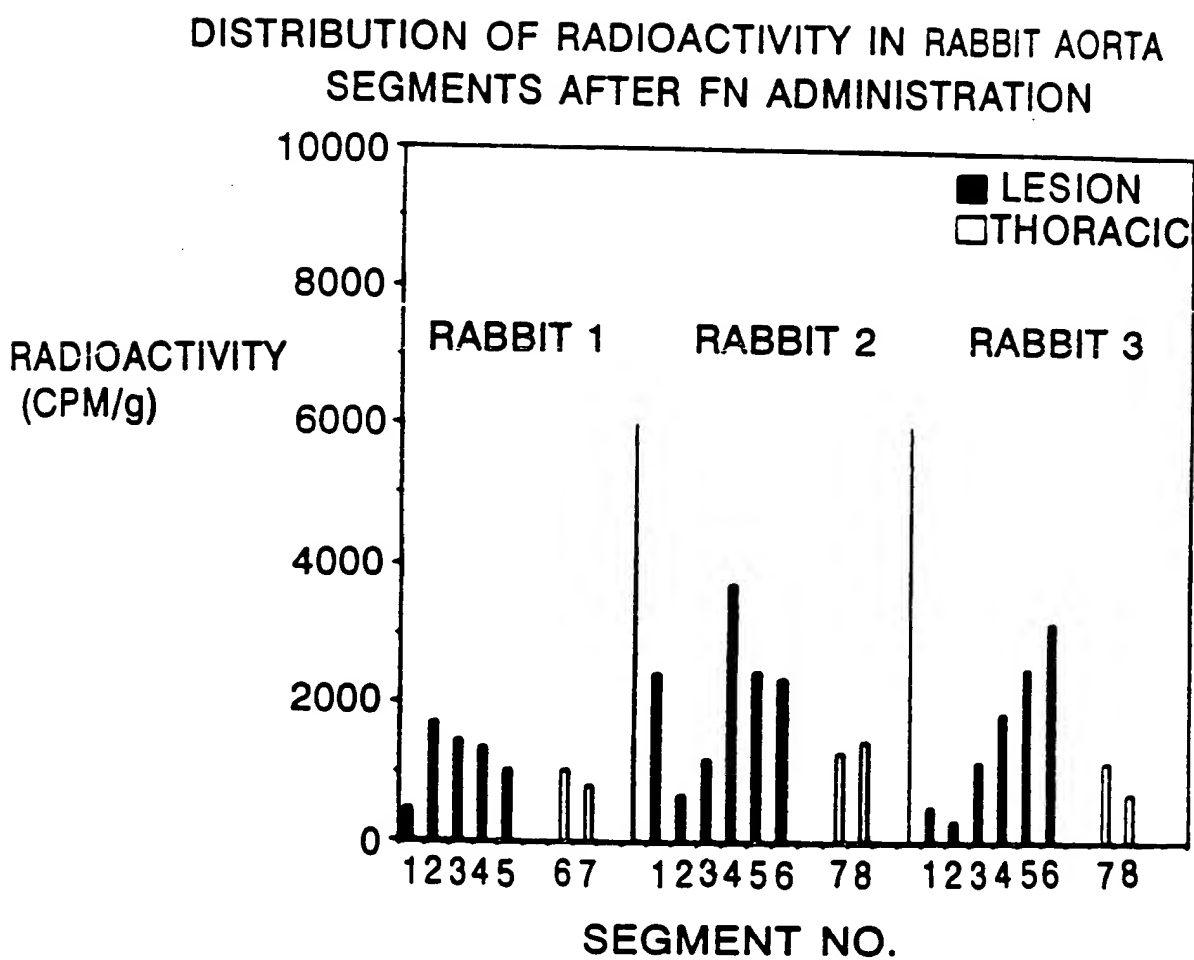
FIGURE 28



09492971.012700

58/86

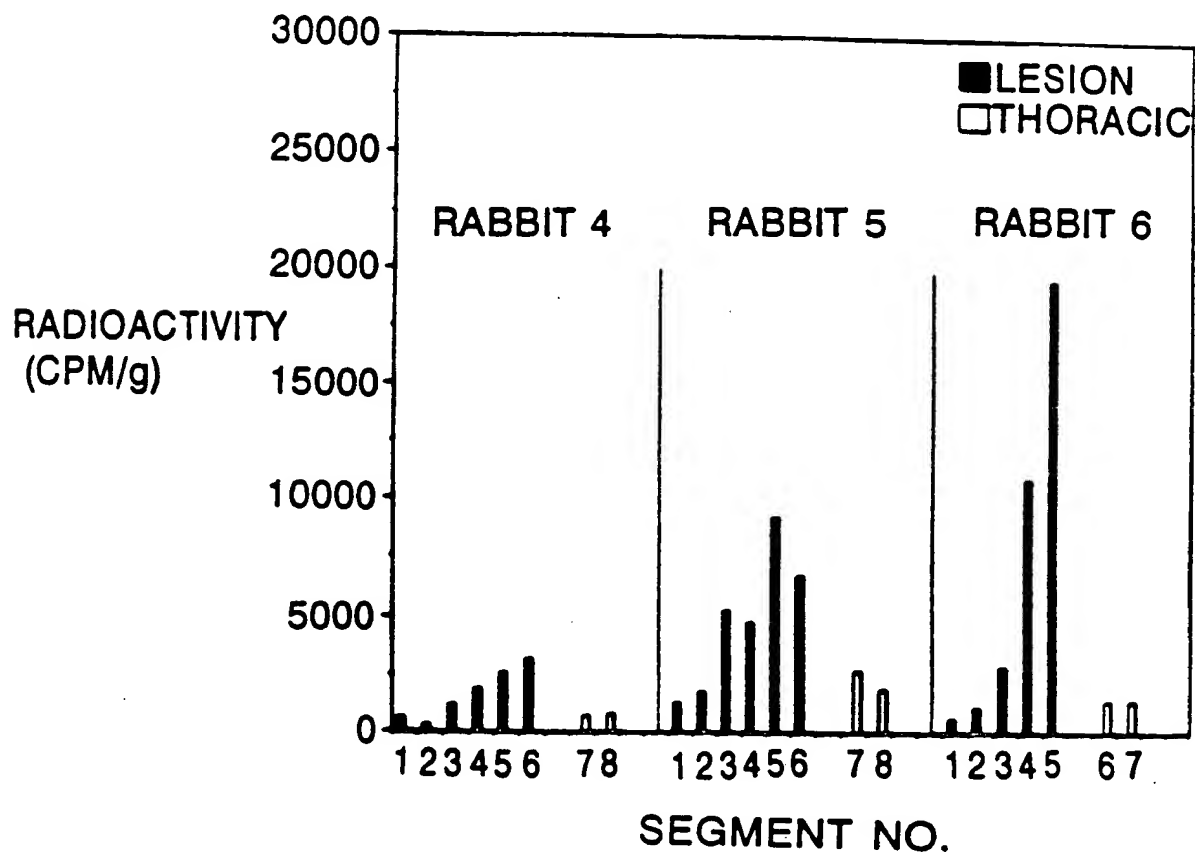
FIGURE 29A



59/86

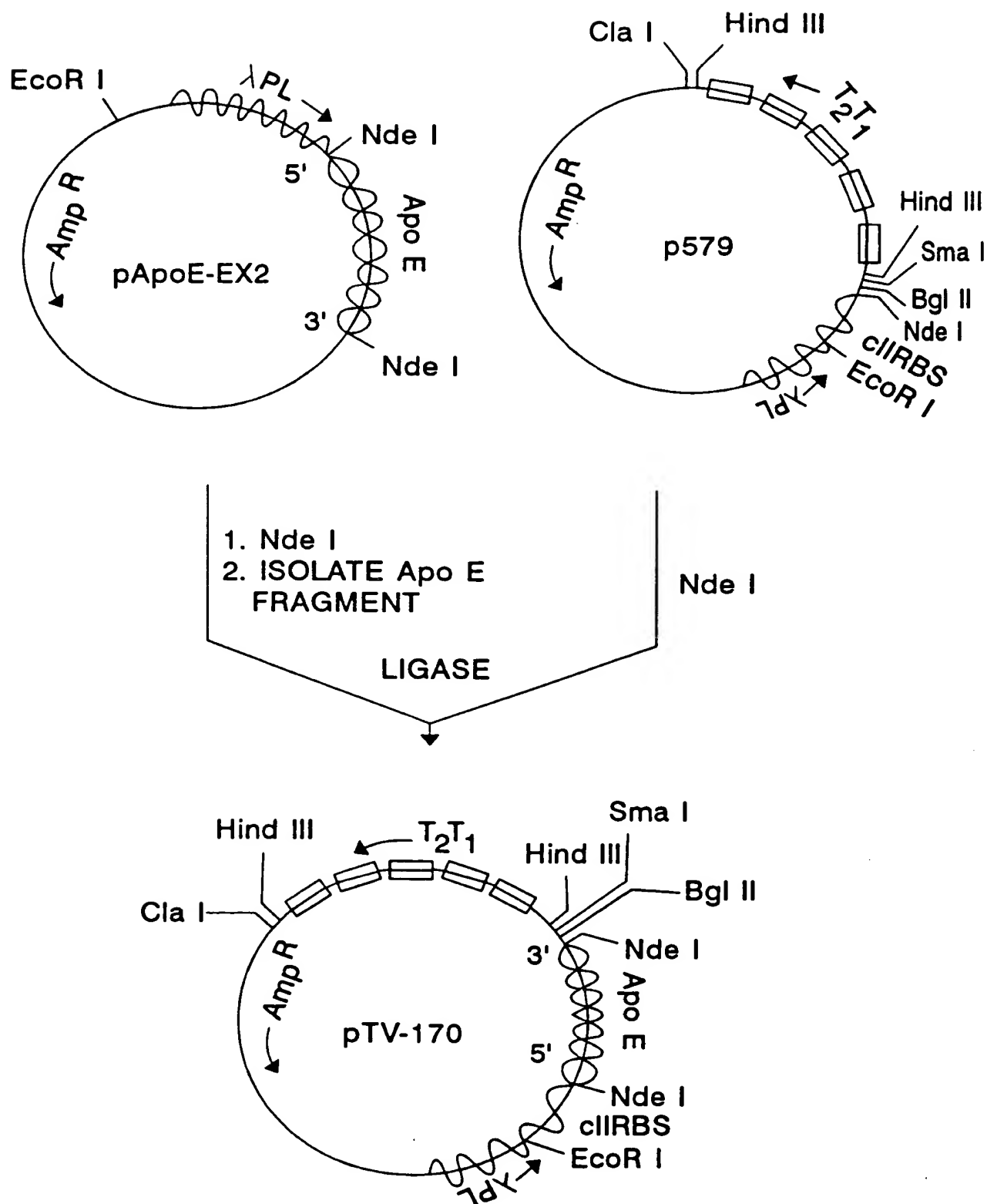
FIGURE 29B

DISTRIBUTION OF RADIOACTIVITY IN RABBIT AORTA  
SEGMENTS AFTER 31kD FBD ADMINISTRATION



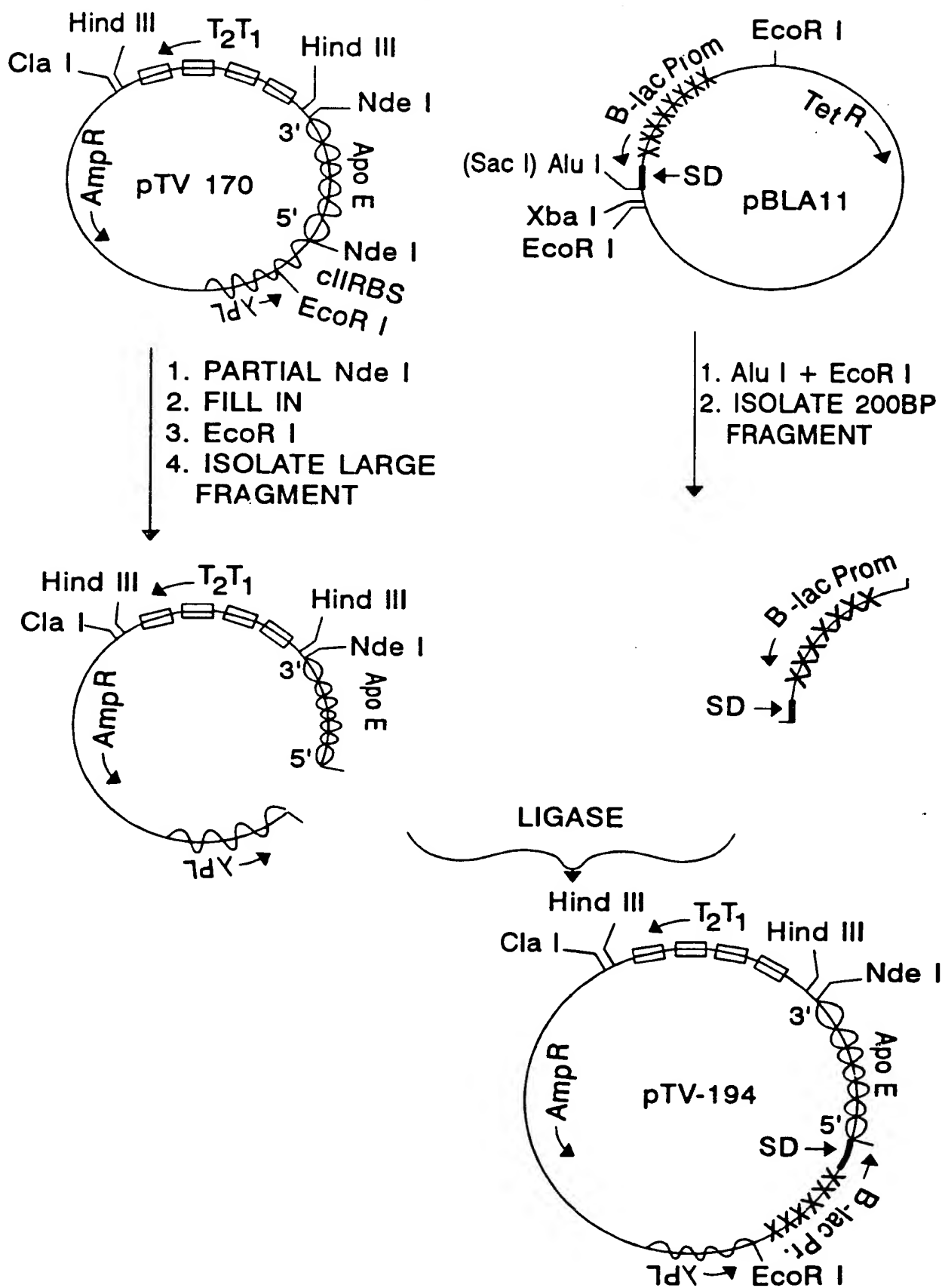
60/86

FIGURE 30



09492971.012700

FIGURE 31



09492971.012700

FIGURE 32A

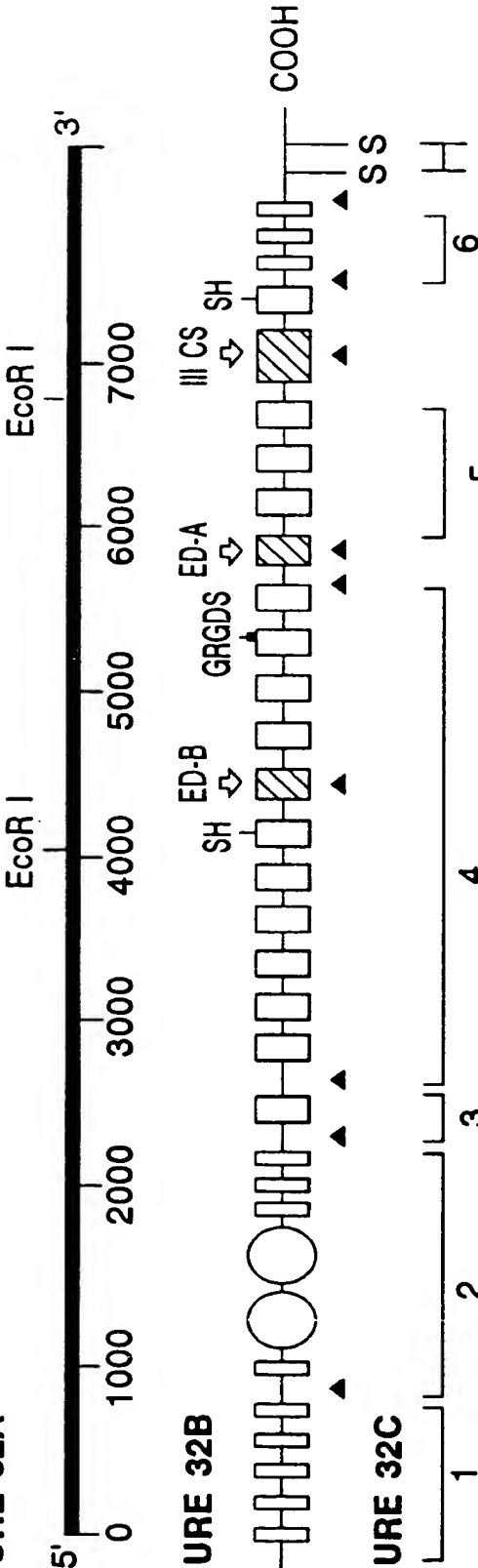


FIGURE 32B

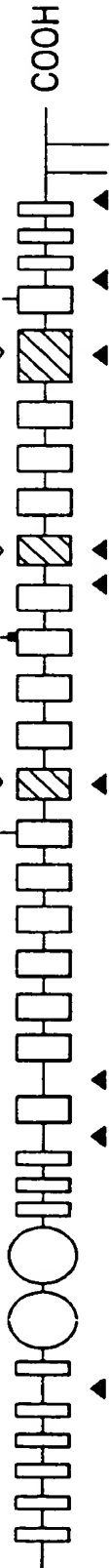


FIGURE 32C

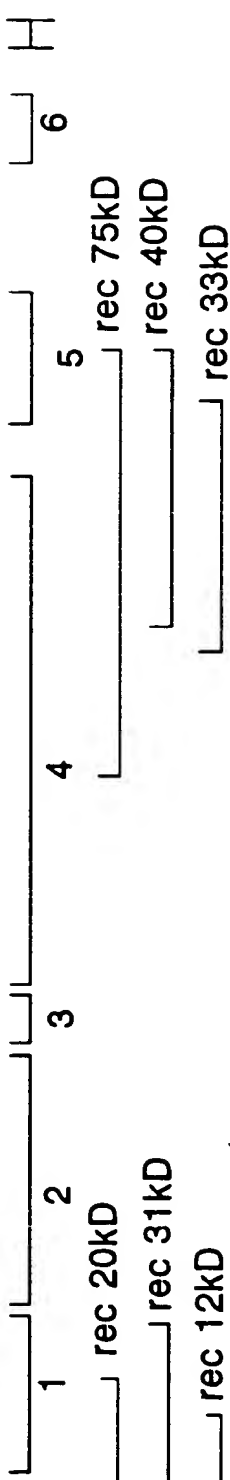


FIGURE 32D



FIGURE 32E

	NUCLEOTIDES
rec-12kD:	14-340
rec-20kD:	14-472
rec-31kD:	14-799
rec-40kD:	4151-5566
rec-75kD:	3317-5566
rec-33kD:	3998-5179

63/86

FIGURE 33

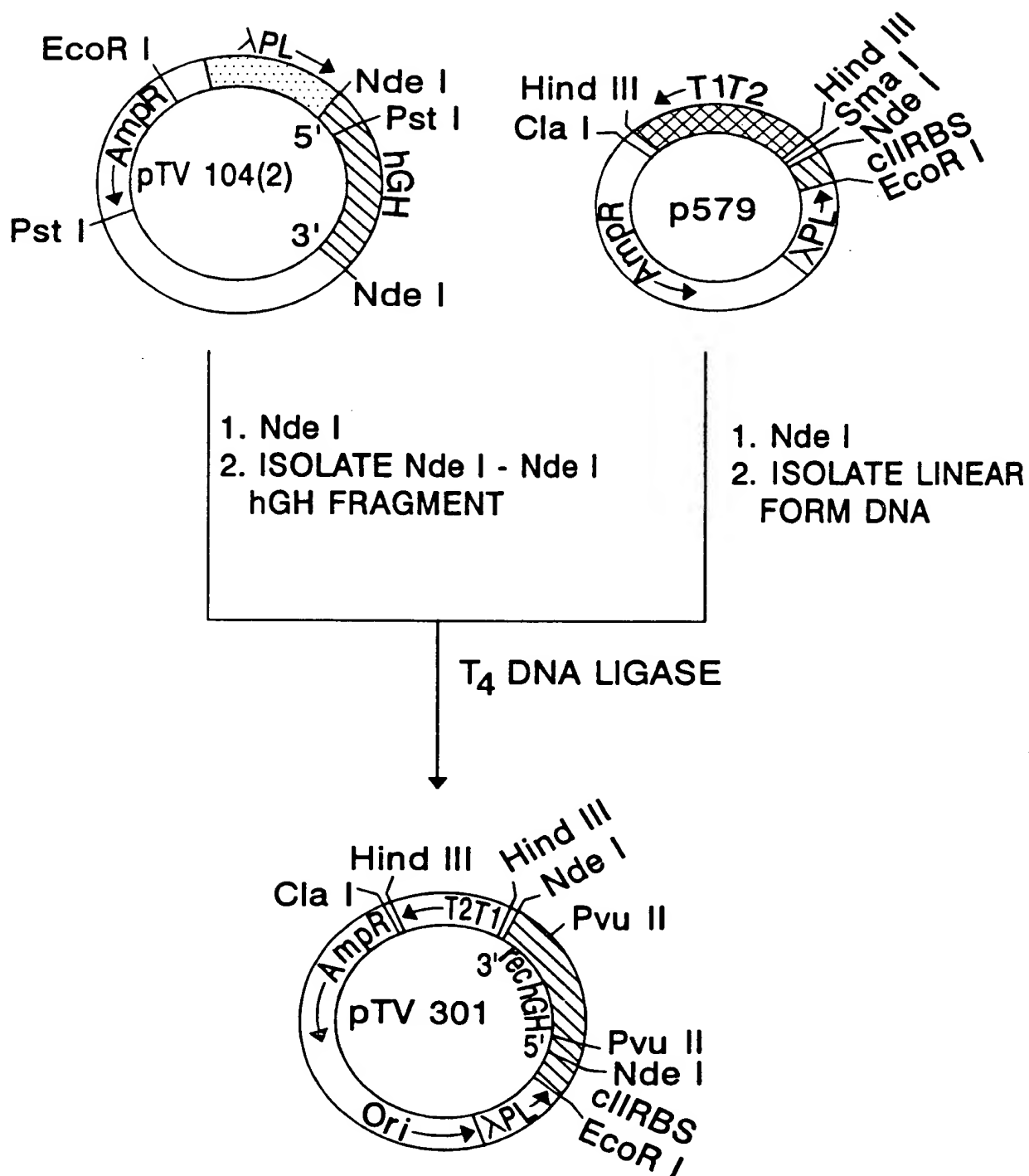


FIGURE 34

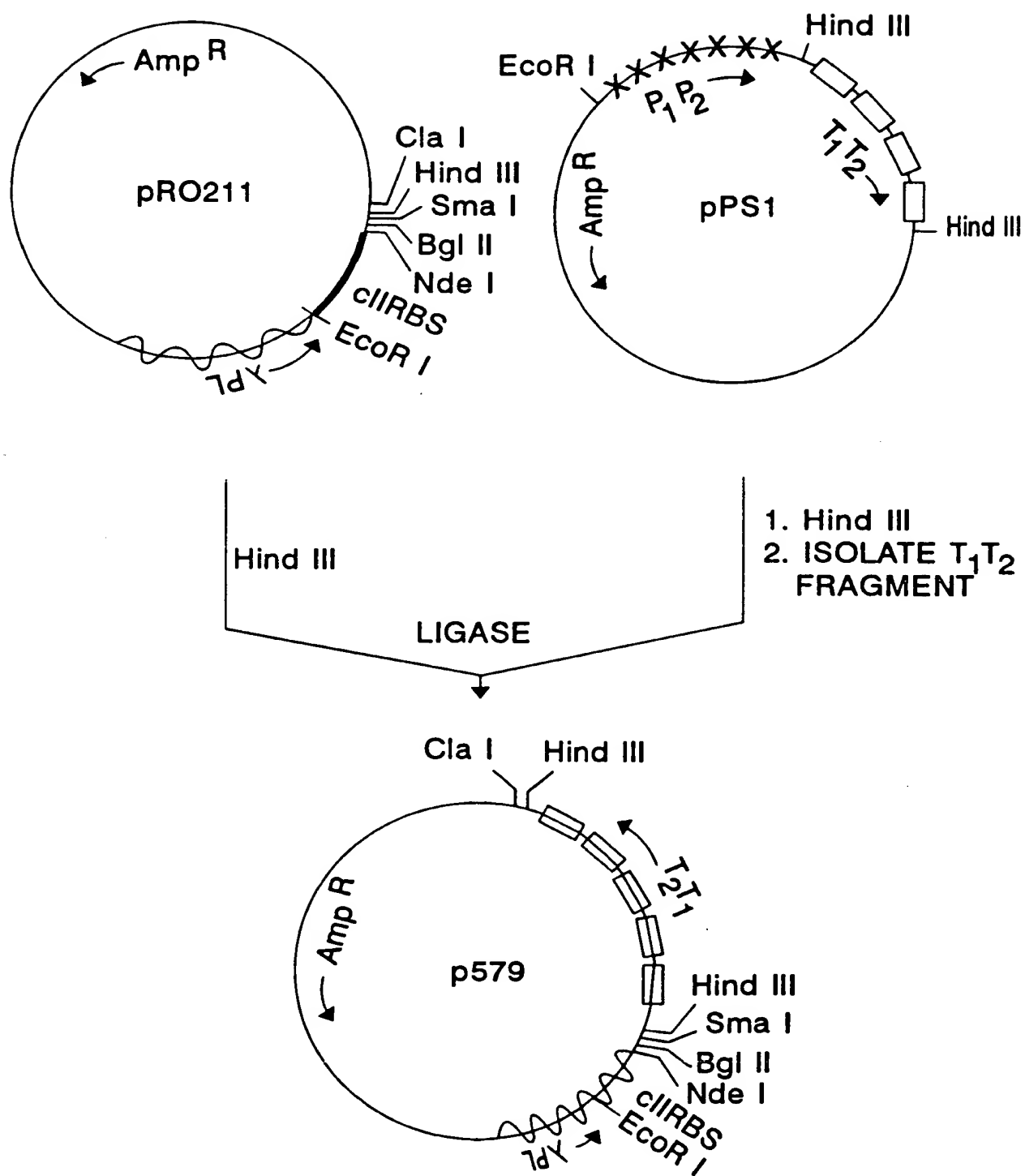
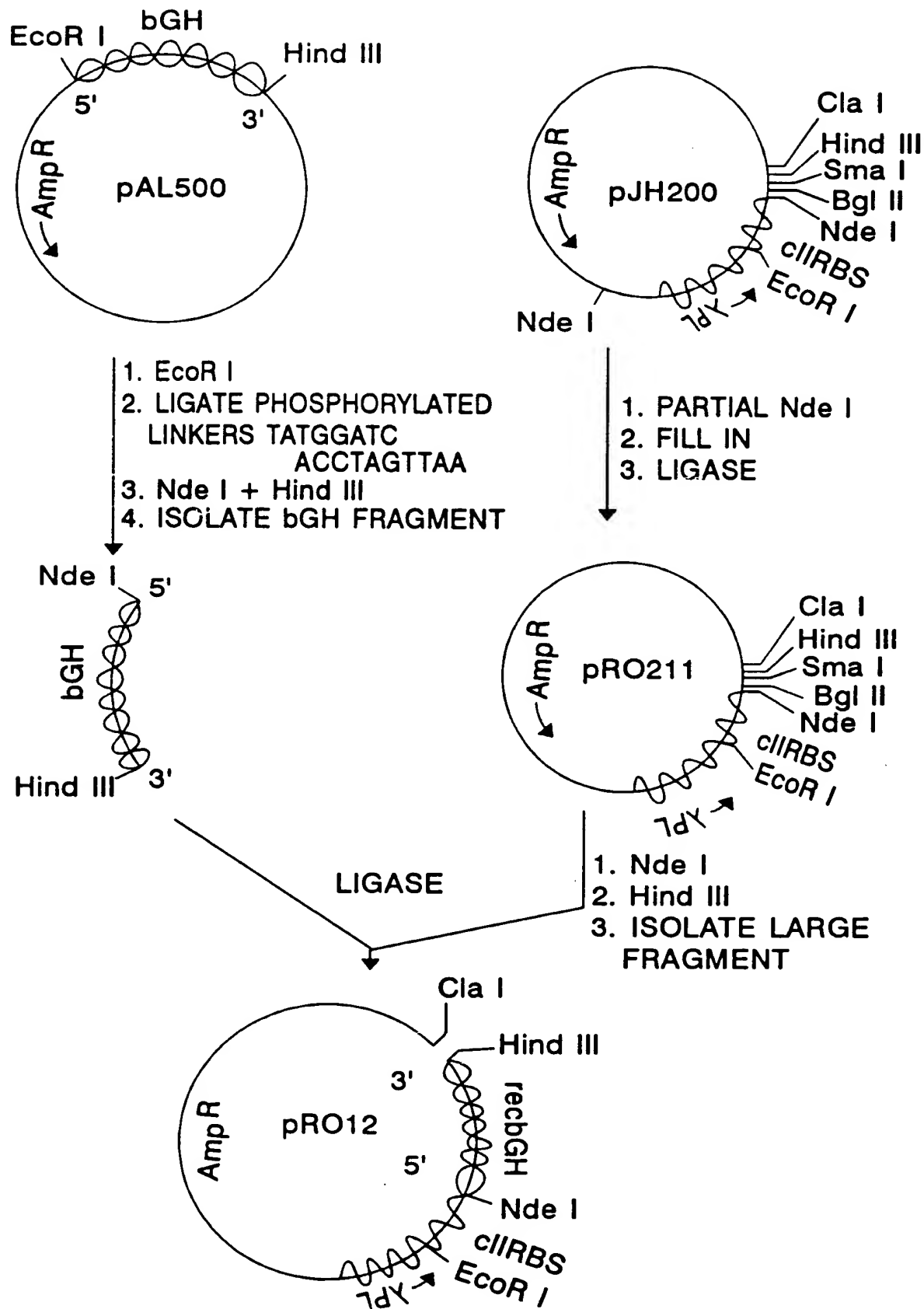


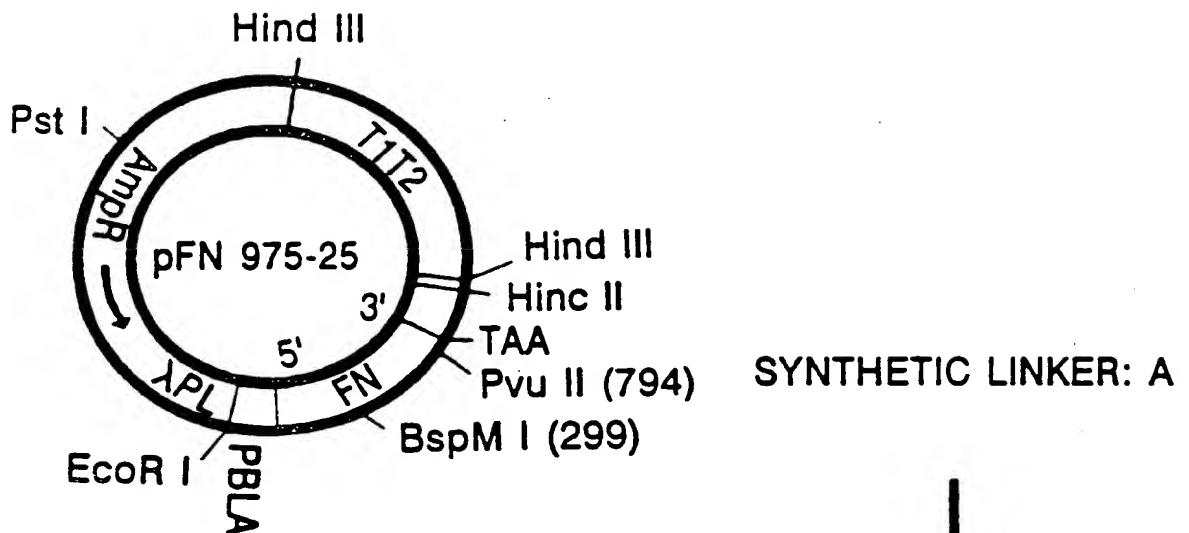


FIGURE 35



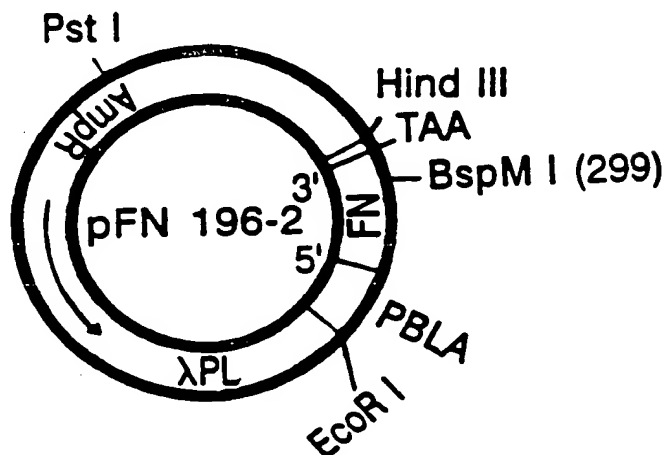
004210-1626460

66/86  
FIGURE 36



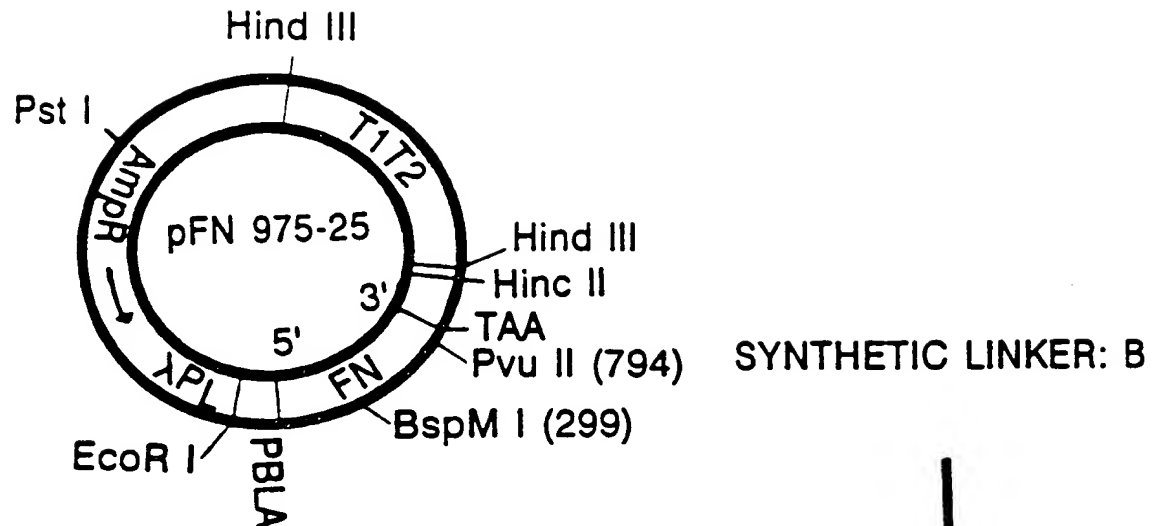
1. DIGEST WITH BspM I + Hind III
2. ISOLATE LARGE BspM I - Hind III FRAGMENT

T<sub>4</sub> DNA LIGASE



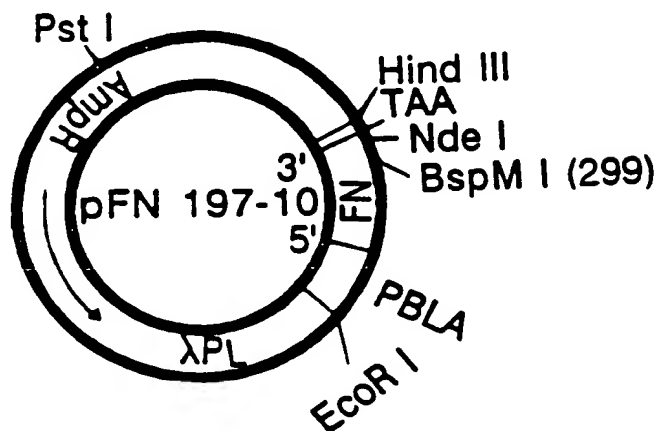
00492971.012700

67/86  
FIGURE 37

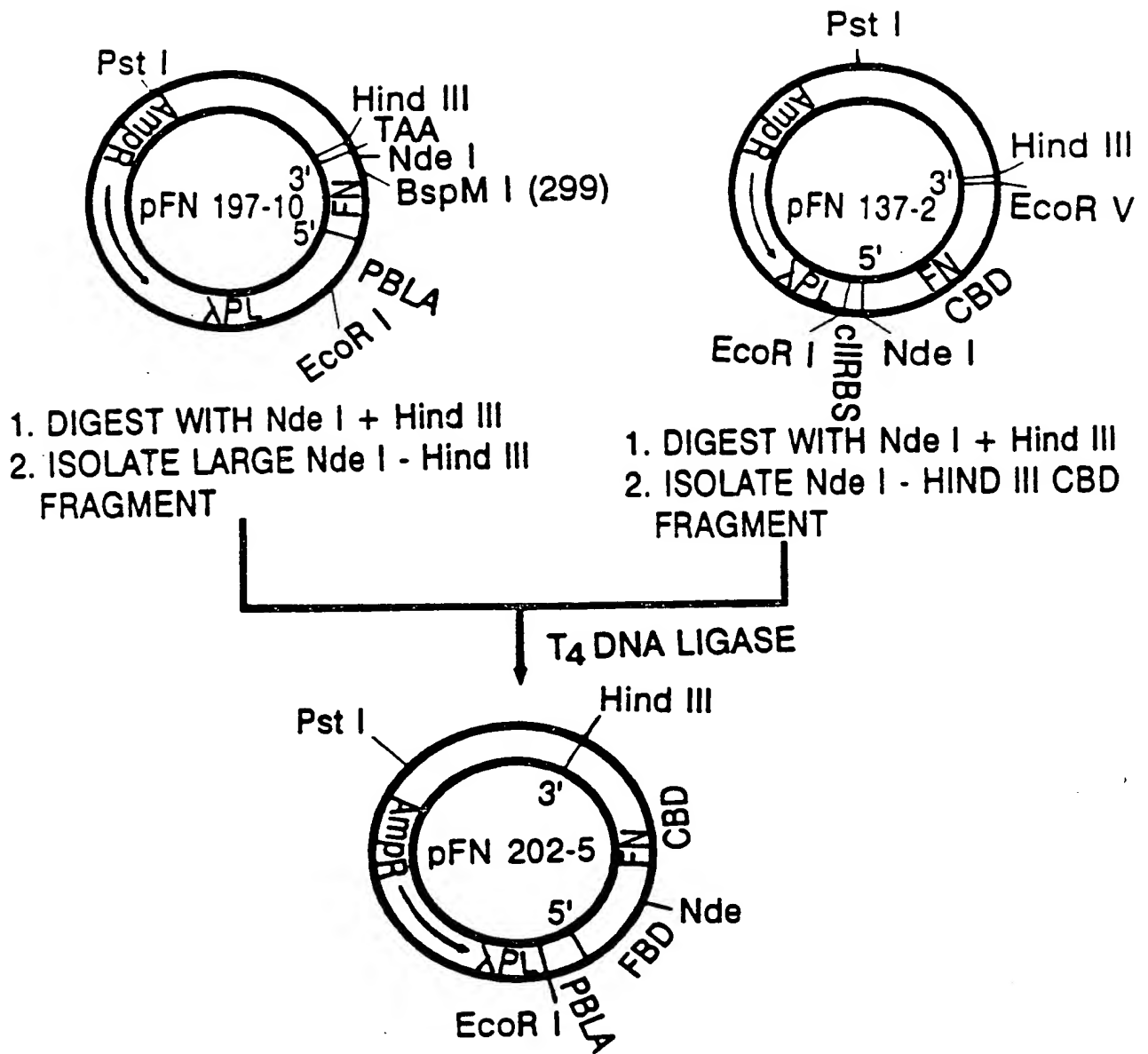


1. DIGEST WITH BspM I + Hind III
2. ISOLATE LARGE BspM I - Hind III FRAGMENT

T<sub>4</sub> DNA LIGASE

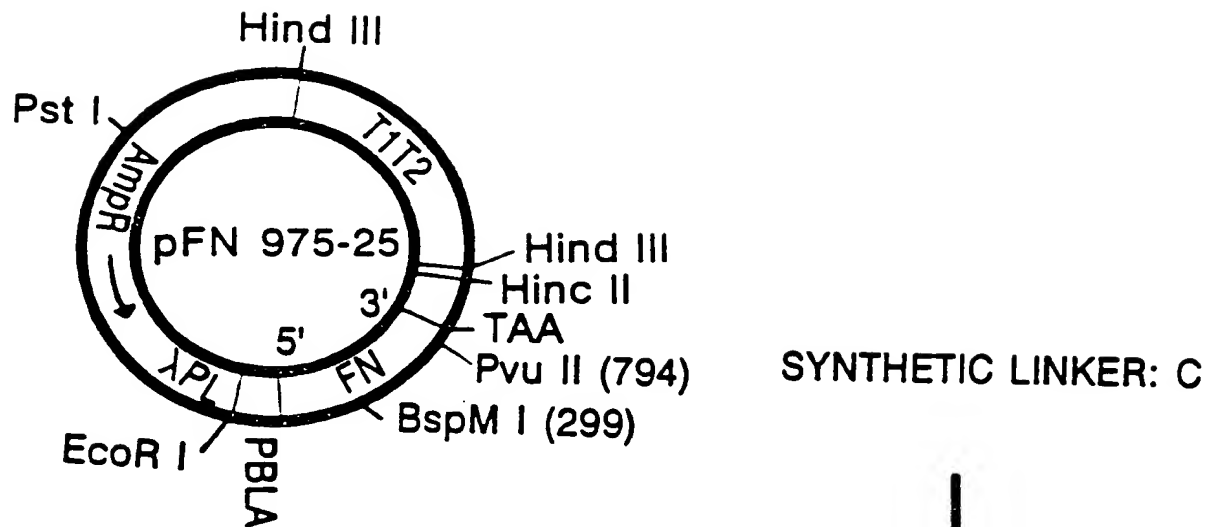


68/86  
FIGURE 38



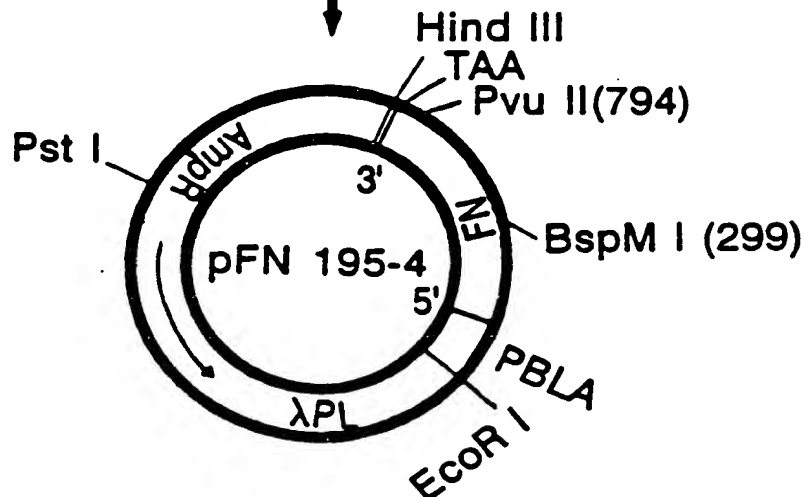
00492971.012700

69/86  
FIGURE 39



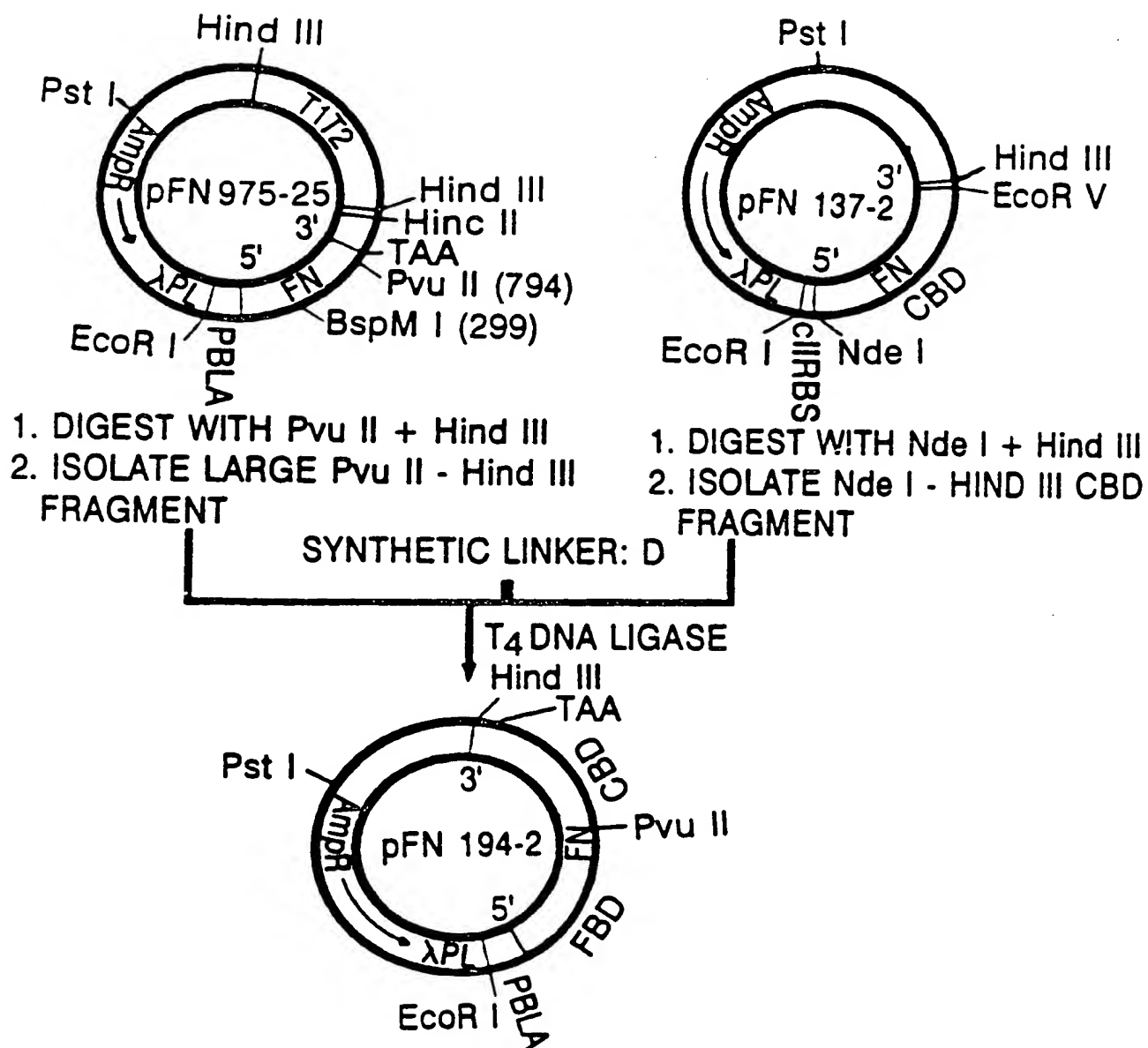
1. DIGEST WITH Pvu II + Hind III
2. ISOLATE LARGE Pvu II - Hind III FRAGMENT

T<sub>4</sub> DNA LIGASE



09492971.012700

70/86  
FIGURE 40



05492971-012700

FIGURE 41

A      5'      GGGCTGGGCGAGGAGAGATAAGCTGTACCATCGCAAAACCGCTAACAGCTGA      3'  
         3'      ACCCGCTCCCTCTTATTTCGACATGGTAGCGTTTGGCGATTGTCGACTTCGA      5'

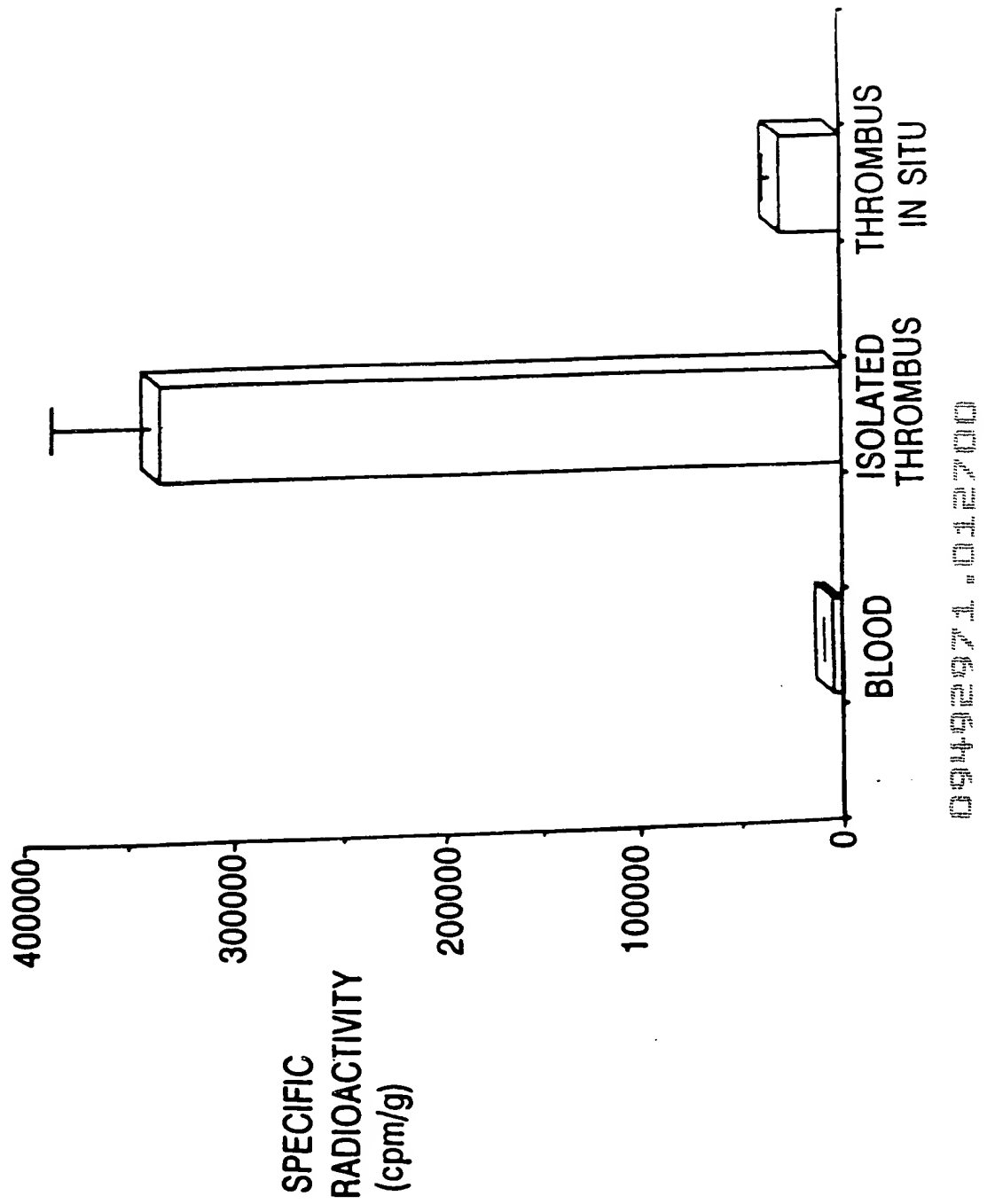
B      5'      GGGCTGGGCGAGGAGAGATAAGCTGTACCATCGCAAAACCGCCATATGTAAA      3' 71/86  
         3'      ACCCGCTCCCTCTTATTTCGACATGGTAGCGTTTGGCGGTATACATTTTCGA      5'

C      5'      ATGGCCGTGGAGACAGCTAACAGCTGA      3'  
         3'      TACCGGCACCTCTGTTCGATTGTCGACTTCGA      5'

D      5'      CTGTATACCAACC      3'  
         3'      GACATATGGTTGGAT      5'

72/86

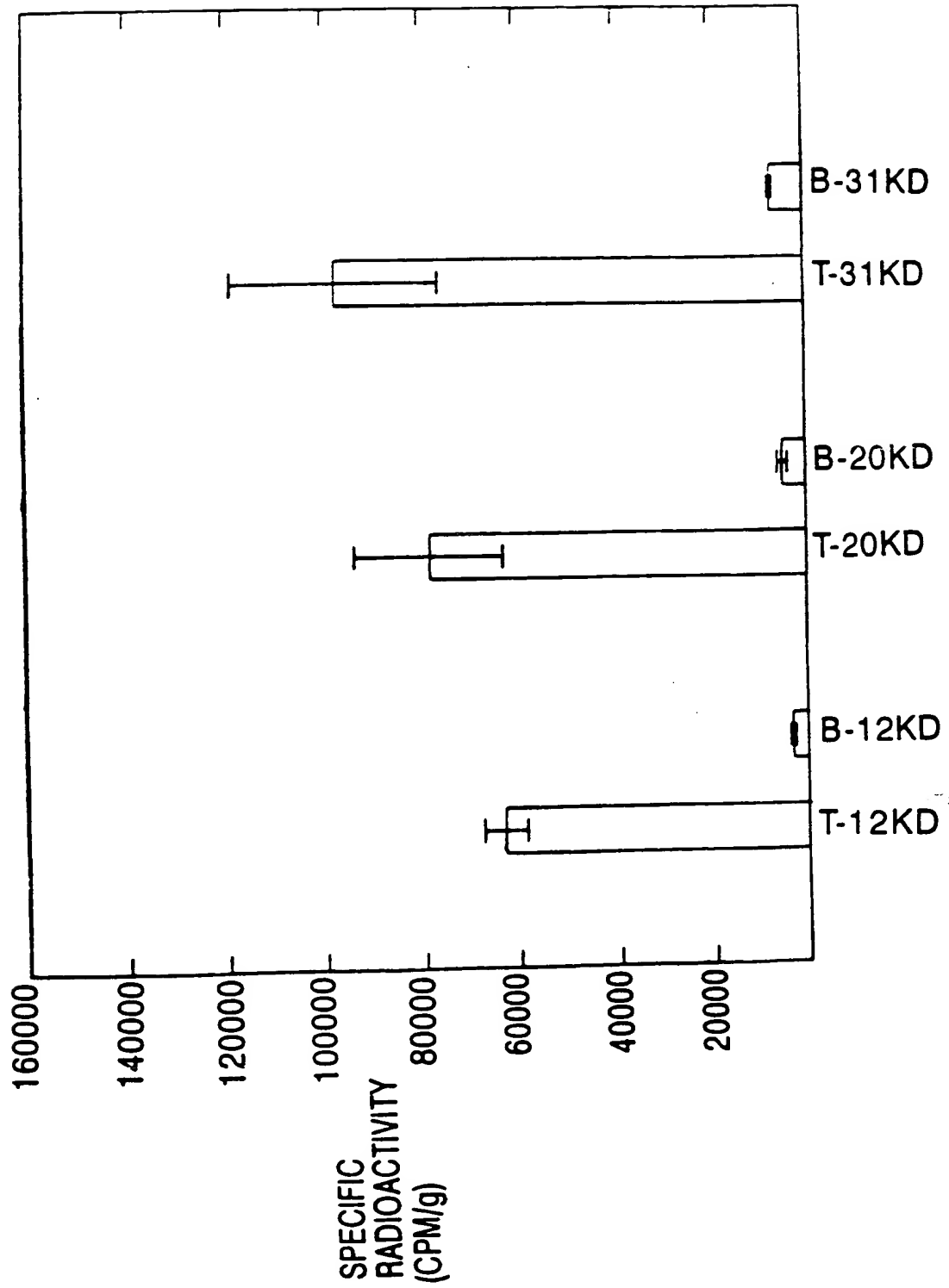
FIGURE 42





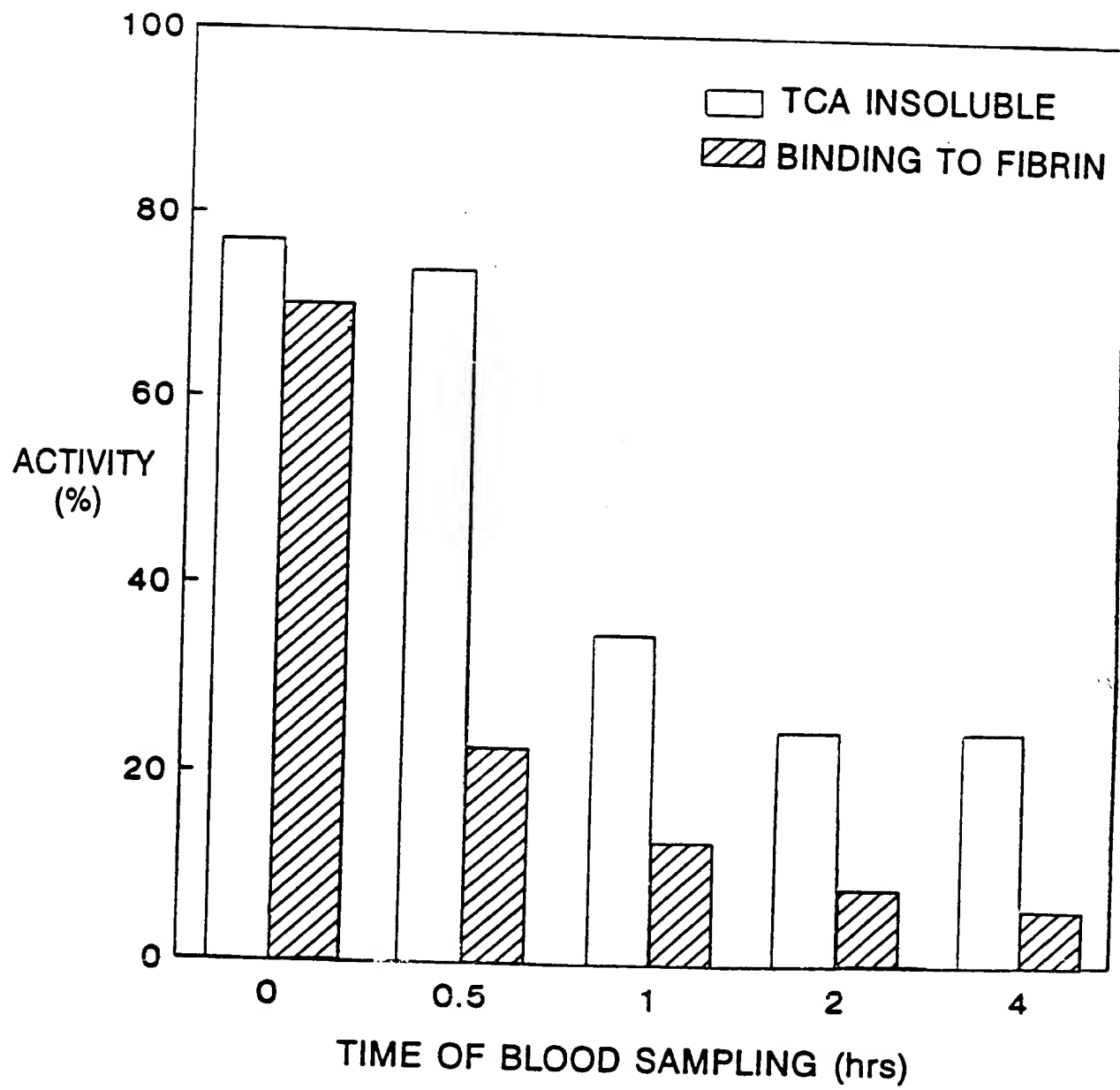
73/86

FIGURE 43



09492971-012700

74/86  
FIGURE 44



75/86

FIGURE 45

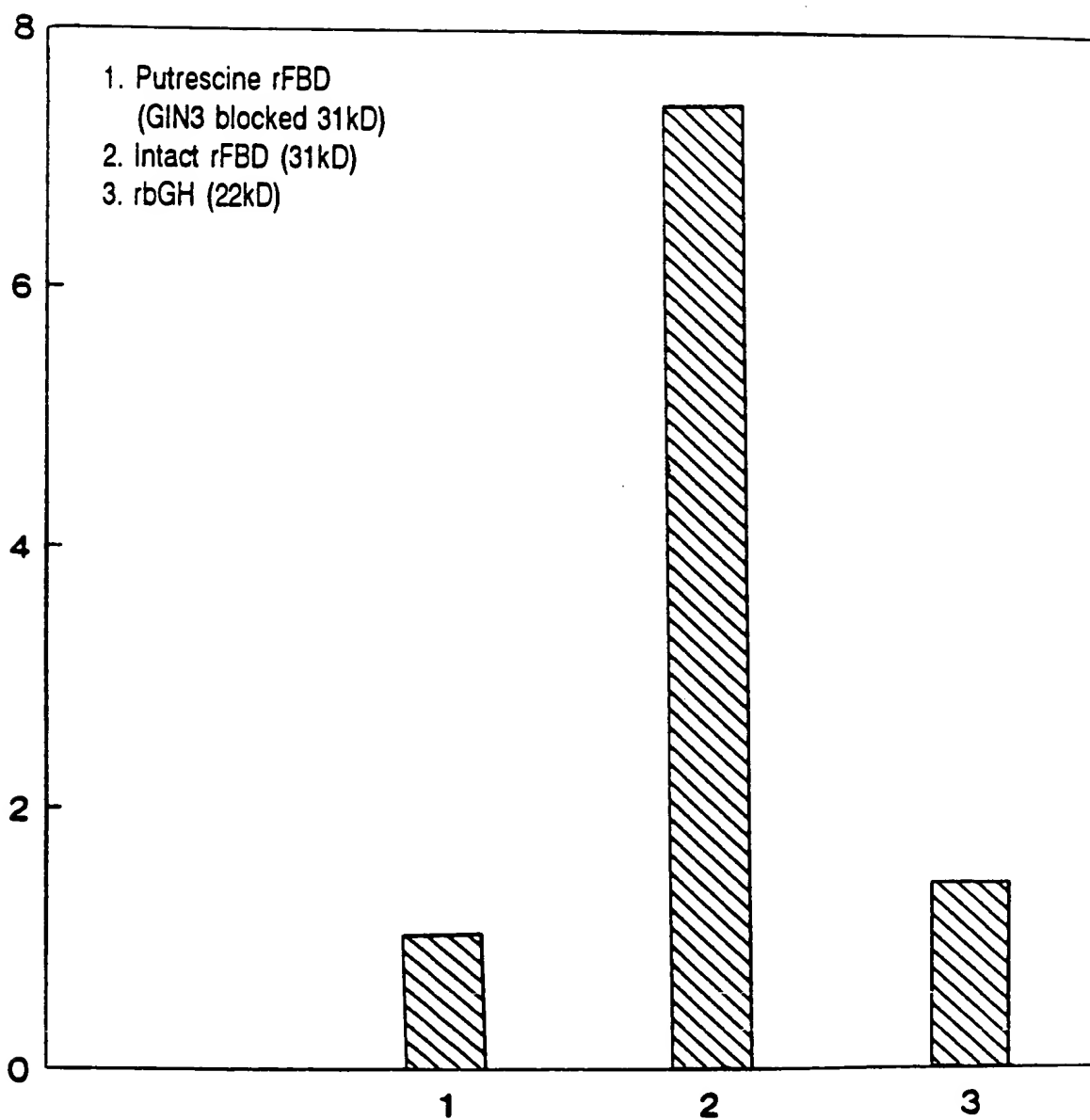


FIGURE 46A

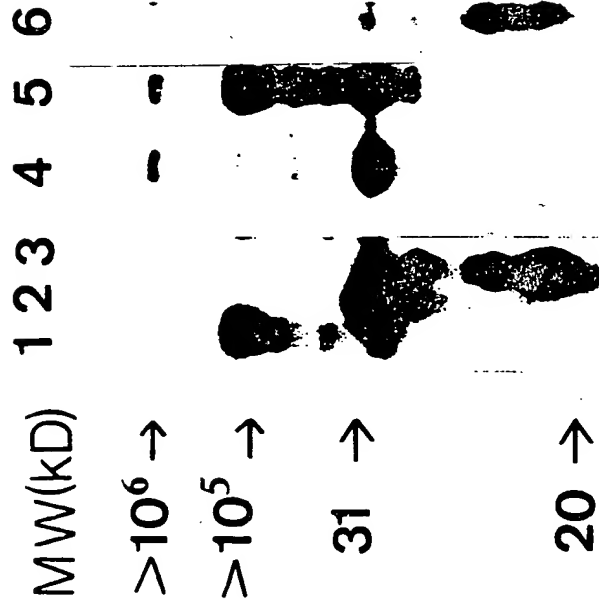
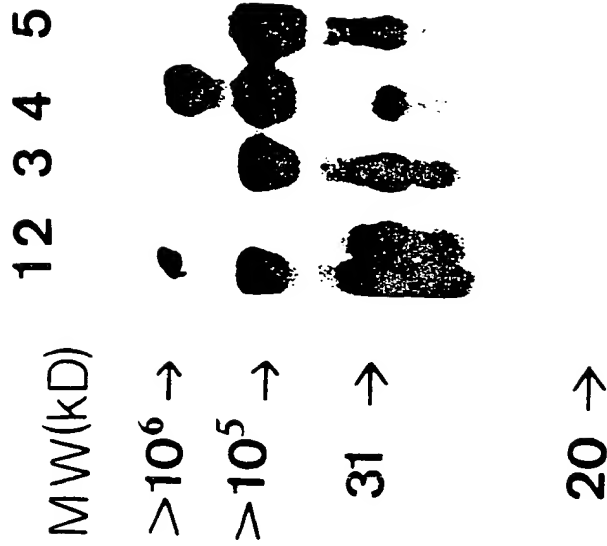


FIGURE 46B



77/86

FIGURE 47B

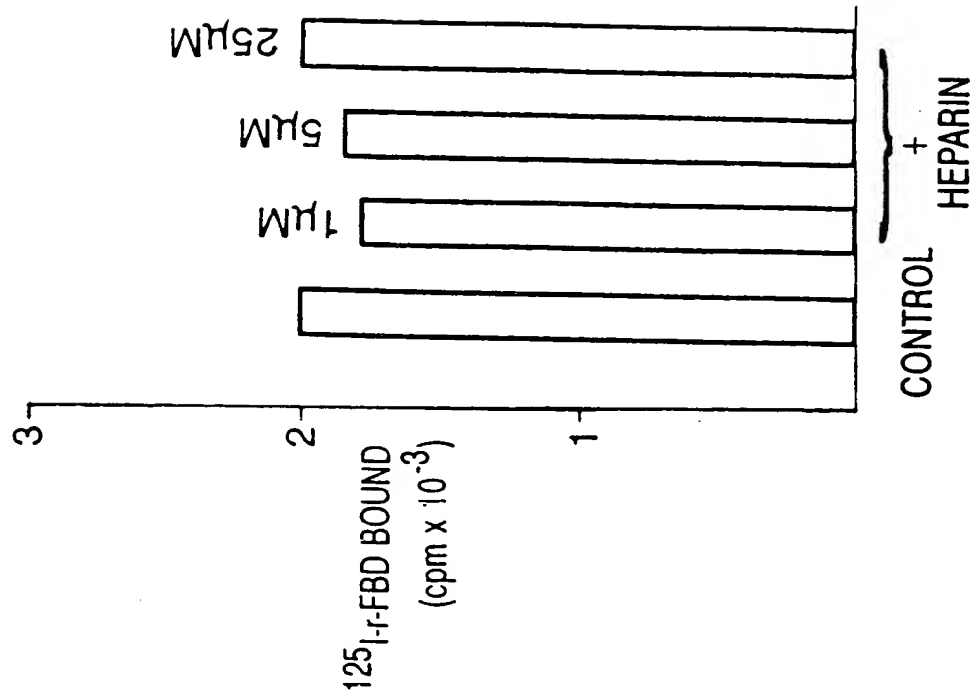
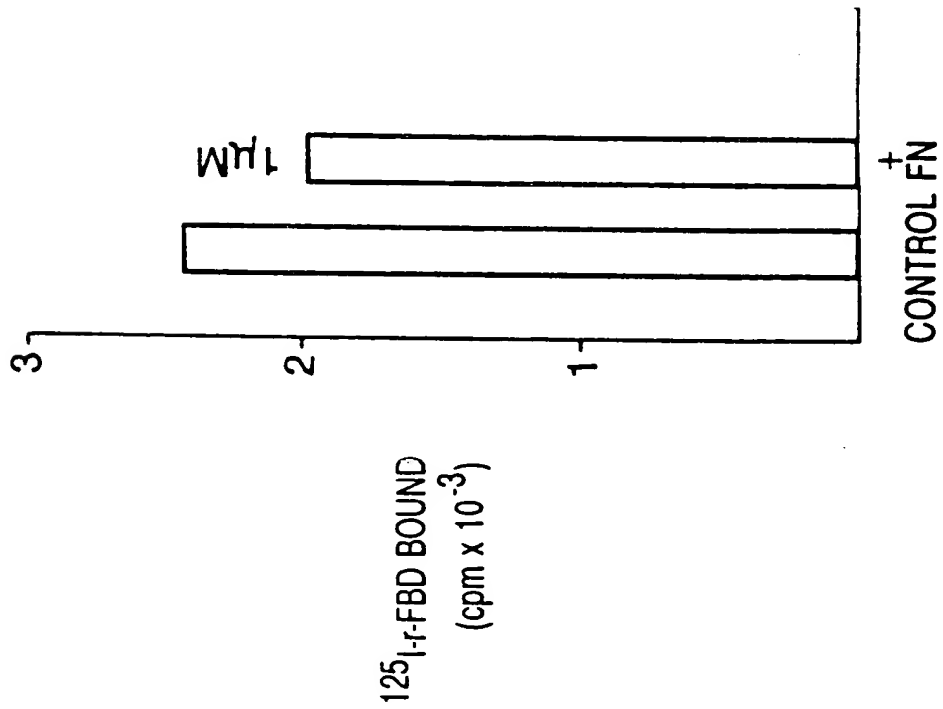
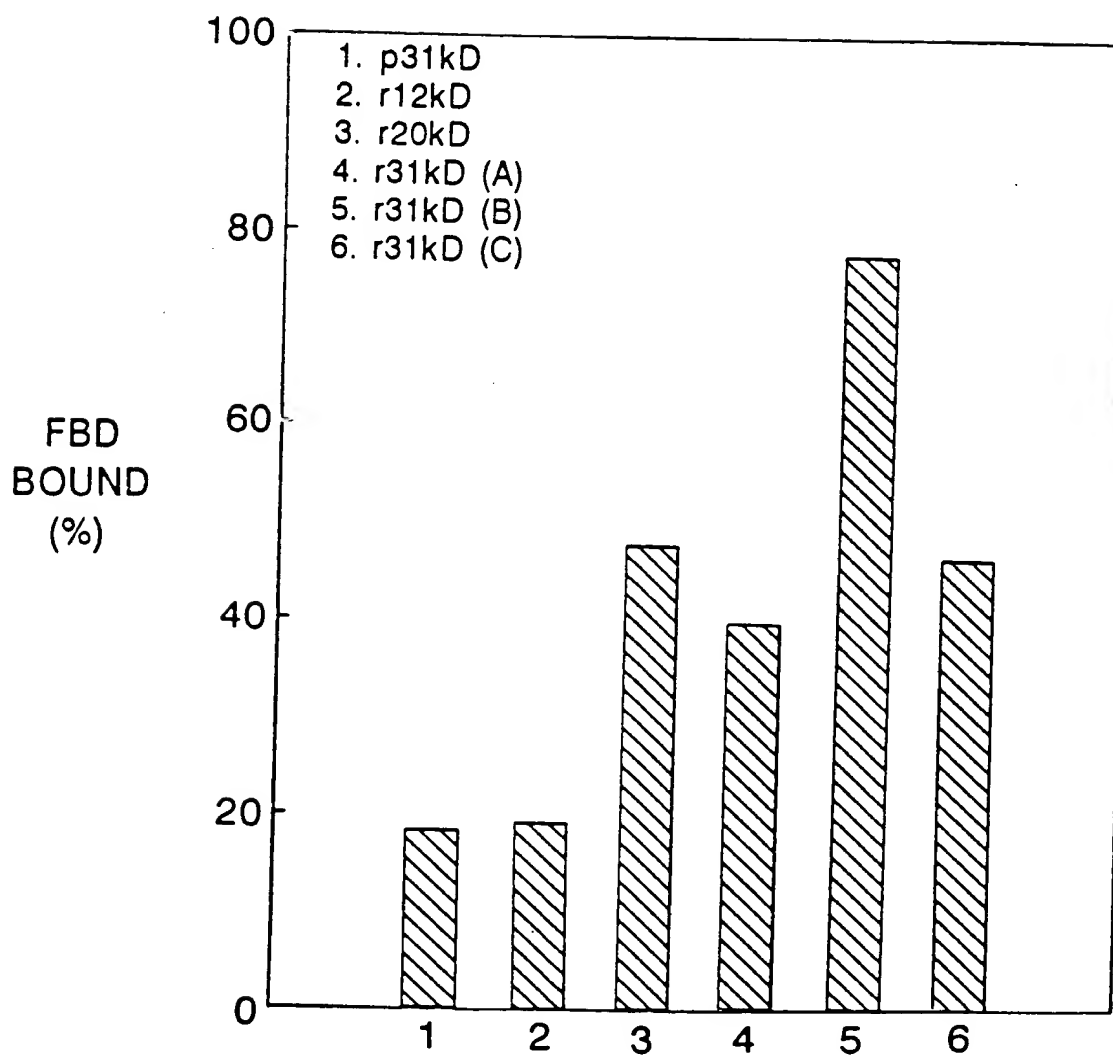


FIGURE 47A



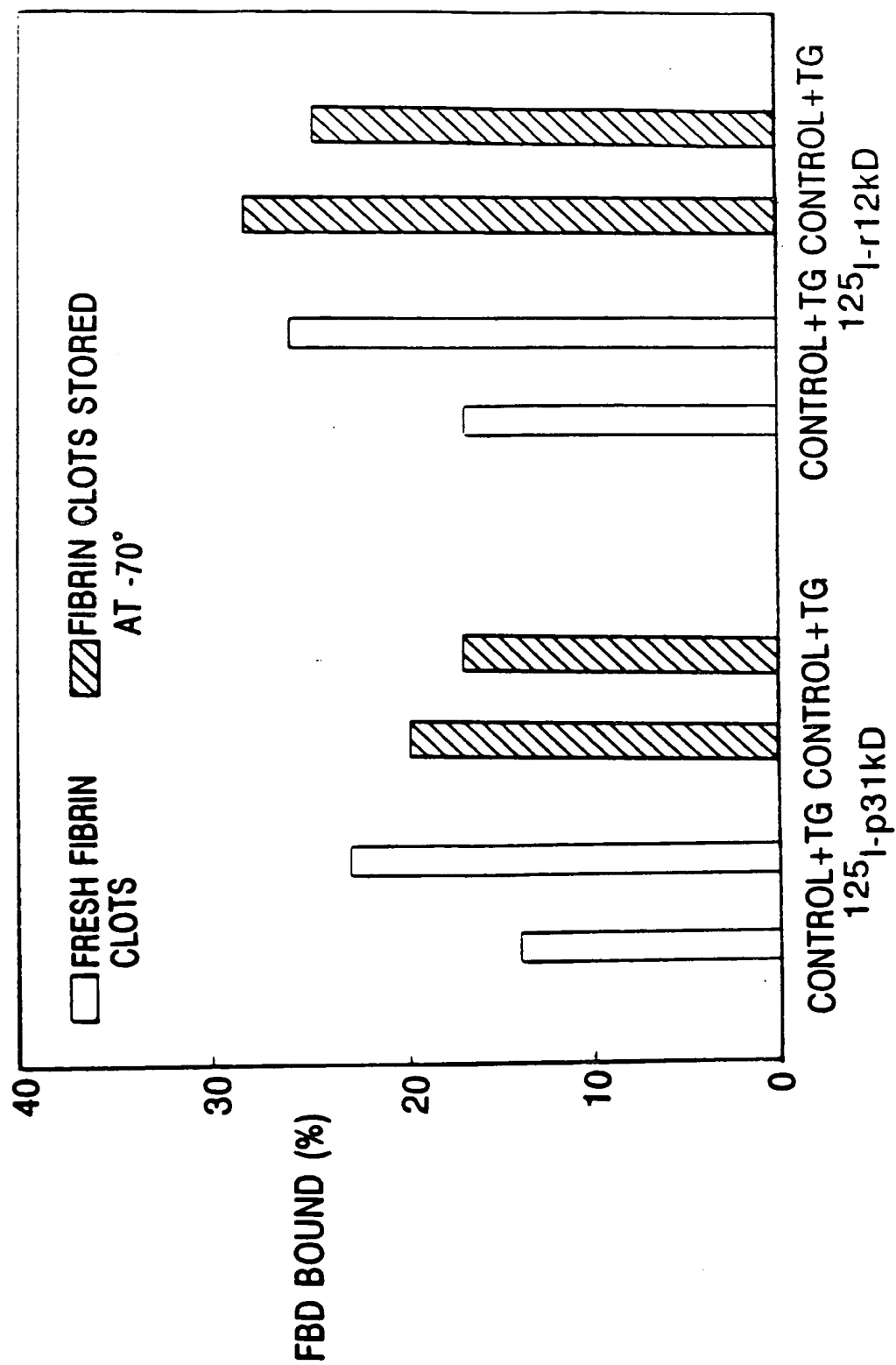
09492971-012700

78/86  
FIGURE 48



79/86

FIGURE 49



034492971.012700

FIGURE 50A

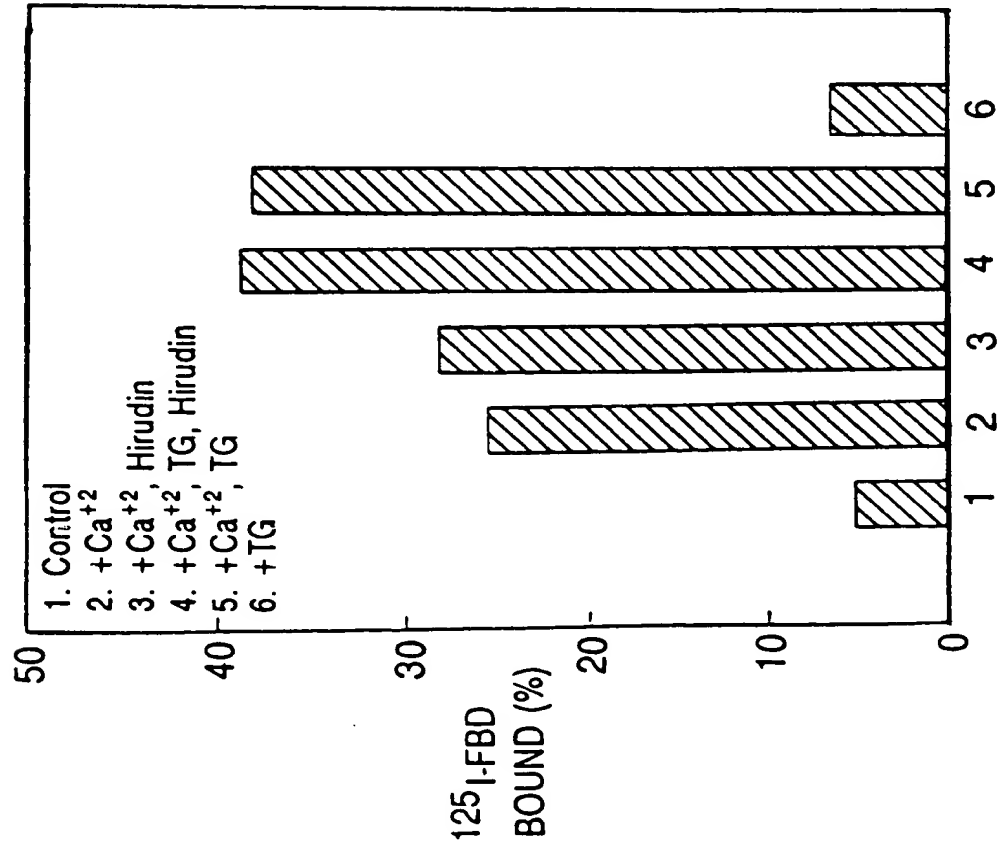
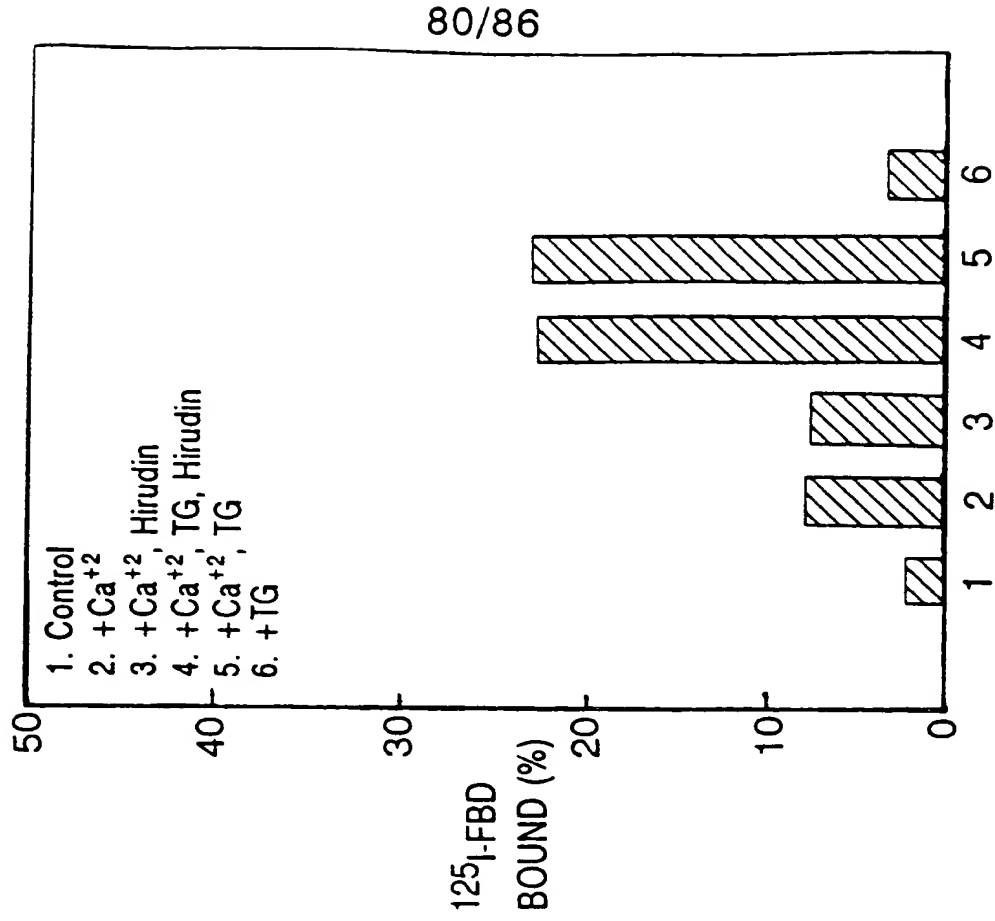


FIGURE 50B





81/86  
FIGURE 51

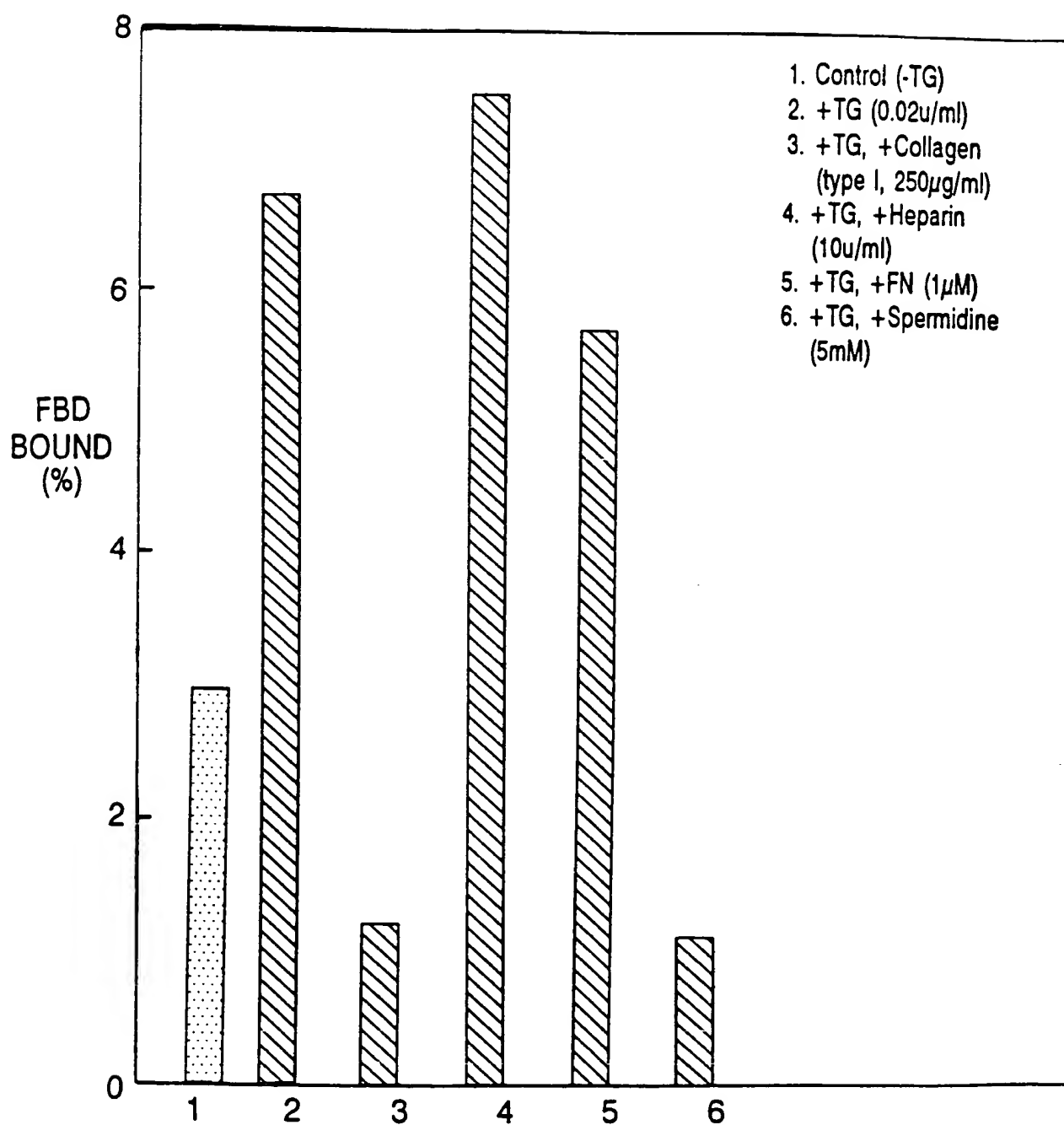


FIGURE 52A-1

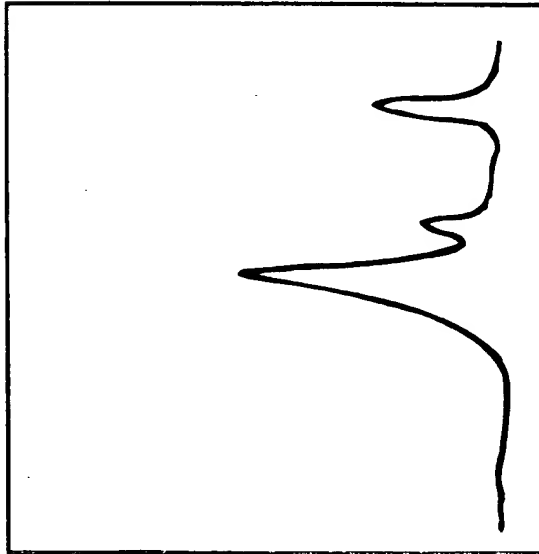


FIGURE 52B-1

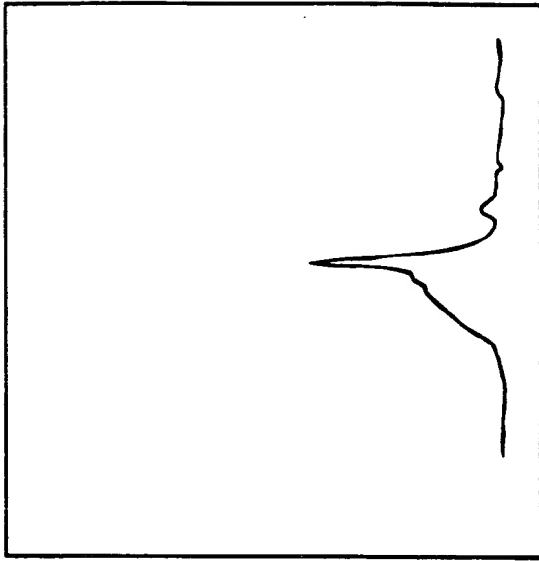


FIGURE 52A-2

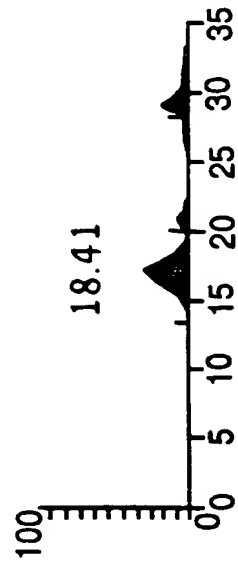


FIGURE 52B-2

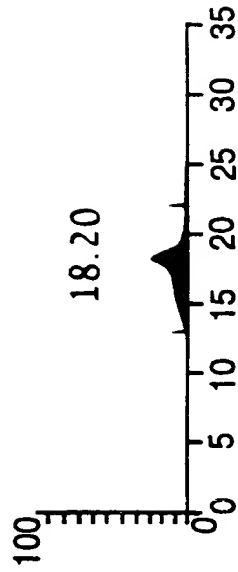


FIGURE 52D-2

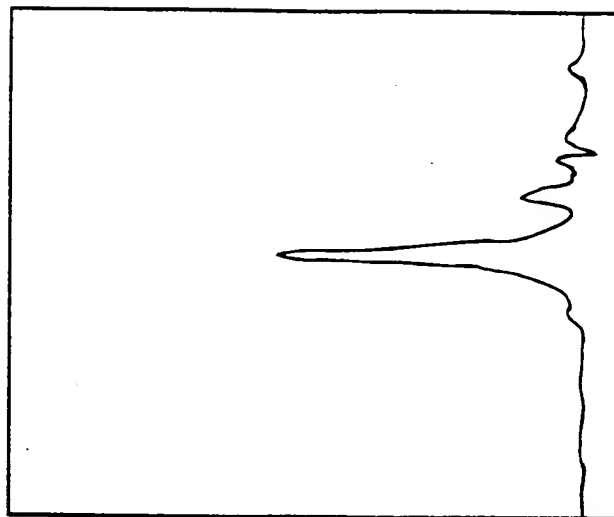


FIGURE 52D-1

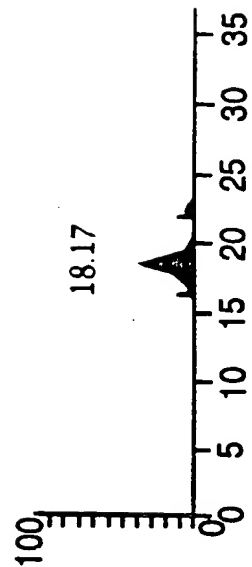


FIGURE 52C-1

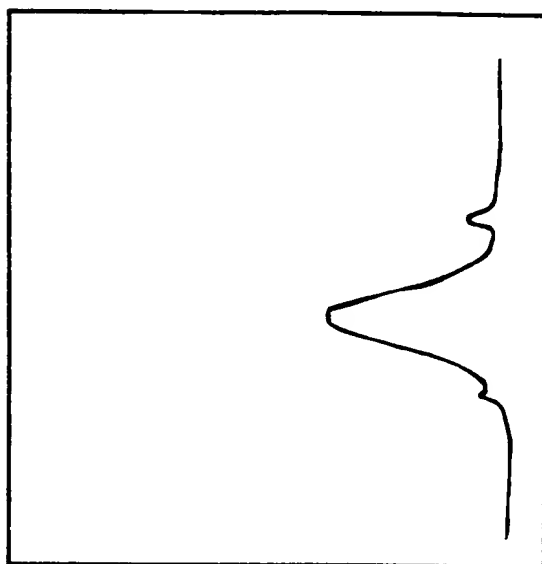


FIGURE 52C-2

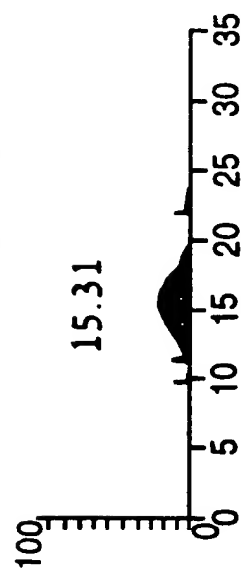


FIGURE 52E-1

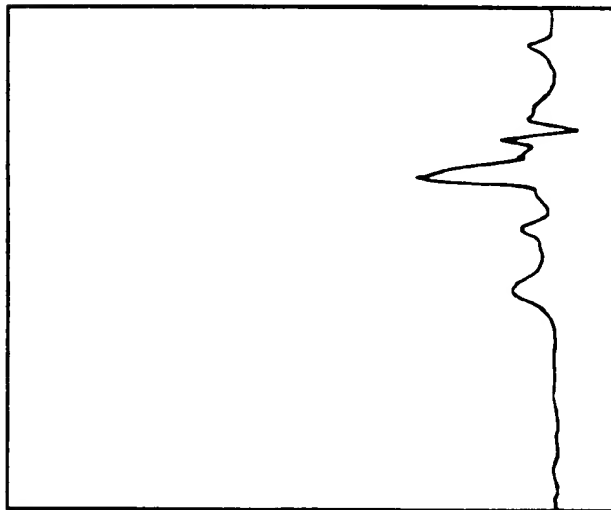


FIGURE 52F-1

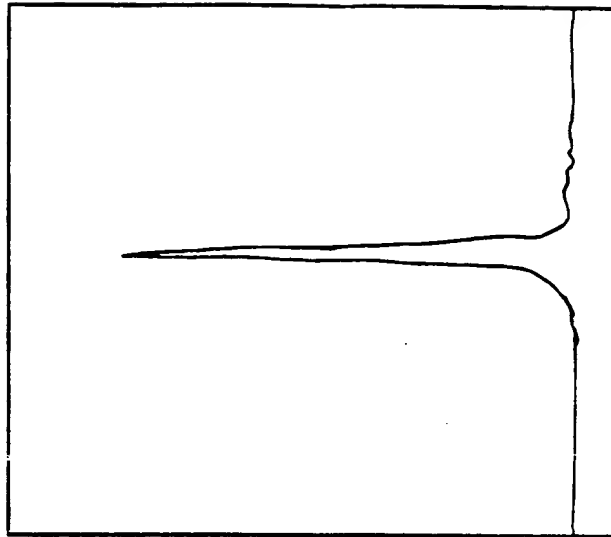


FIGURE 52E-2

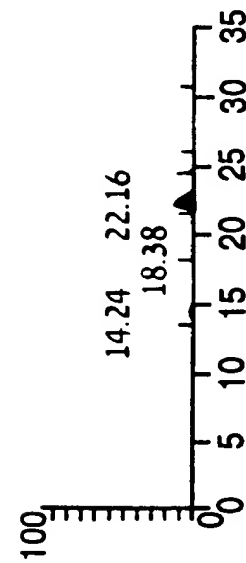
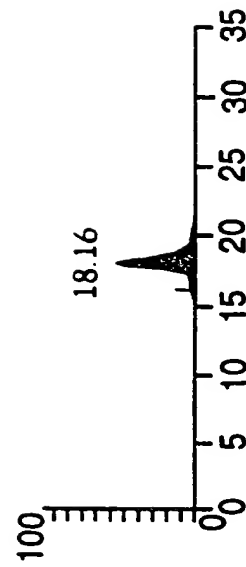


FIGURE 52F-2



85/86

FIGURE 53A

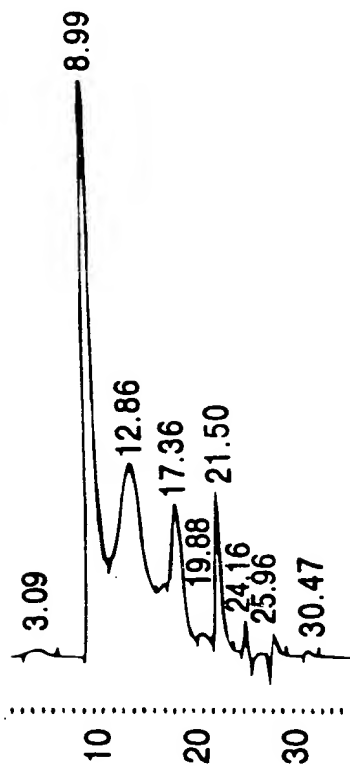


FIGURE 53B

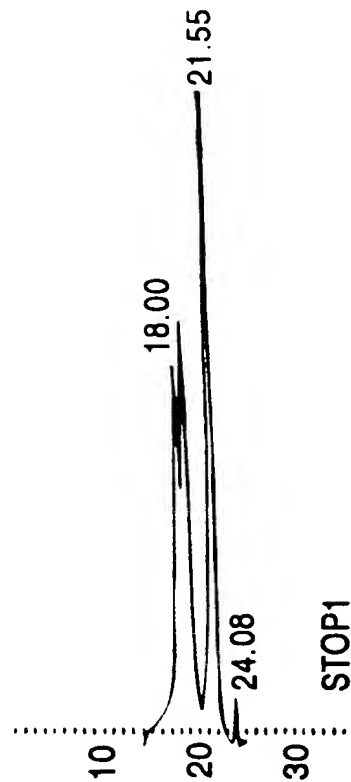


FIGURE 53C

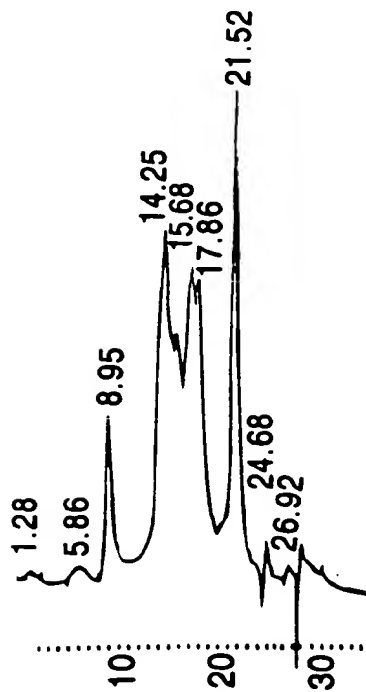
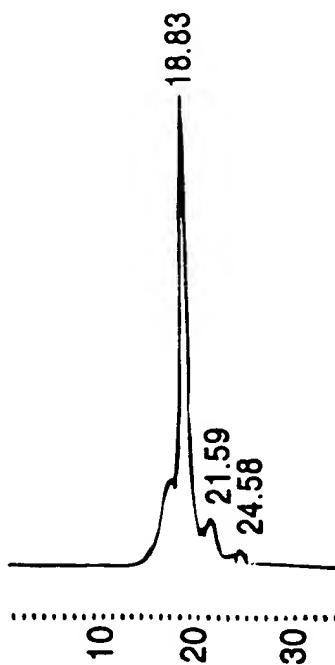


FIGURE 53D



FIGURE 53E



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